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ABSTRACT

Designed to help local school systems in planning a curriculum based on growth and development occurring in children throughout the years from kindergarten through fourth grade, this guide provides teachers with information and suggestions for incorporating an integrated, personalized curriculum into existing instructional programs. Chapter I reviews specific growth characteristics of children in three domains of development (psychomotor, affective, and cognitive) and suggests specific activities for promoting the child's growth in these areas. To further personalize the educational program, chapter II outlines a variety of alternatives for setting up schedules and organizing classroom activities. In chapters III, IV, and V, ideas are presented for integrating subject area objectives and objectives from the psychomotor and affective domains with objectives related to the development of thinking abilities. Chapters VI and VII present additional suggestions for personalizing instruction by describing practical means of involving parents in the educational process and by suggesting a variety of alternatives for assisting teachers in their professional growth. A list of resources teachers can use for promoting personalized instruction, a list of objectives for each of the three domains, and sample units of activities are included in the appendices. (MP)

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Foreword

Early childhood education is a vital link in the education process. The very foundation of education—the success or failure of children in meeting the challenges of the future—rests on the quality of programs available to students in the early grades.

In recent years our knowledge and interest in curriculum for the young child have grown immensely. To broaden that interest and assist local systems in meeting the challenge of educating the young child, the Georgia Department of Education has developed this practical resource guide for educators to use in planning, implementing and evaluating a sound curriculum.

We are confident the ideas and suggestions presented here will support local curriculum planning and staff development and help improve the educational program in elementary schools throughout the state.

Charles McDaniel
State Superintendent of Schools

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Preface

The purpose of the K-4 guide is to help local school systems in planning a curriculum based on child growth and development which occurs throughout the K-4 years and to assist teachers in developing units of instruction based on the range of ability, interest and development of the children in their classrooms.

The early childhood education program must provide students with a broad base of essential skills. The program should be long range and provide for the integration of educational objectives across subject matter areas. The writers have attempted to provide teachers with useful information and suggestions for incorporating an integrated, personalized curriculum into their existing instructional programs.

We hope this guide will be useful in planning local curriculum and staff development and will have positive impact on classroom instruction in Georgia schools.

Lucille G. Jordan
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Division of Curriculum Services

Acknowledgment

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To the Administrator

Over the past decade the concept of early childhood education has been expanded in Georgia to include kindergarten through the fourth grade. The question of how an individual school faculty or a school system's administration can account for the necessary continuity, sequence and integration of instructional content throughout the early childhood years has become a central concern for curriculum developers. This guide is intended to provide a framework upon which individual educational units can develop a local curriculum guide tailored to the needs of their local school population. This framework is intended to present a guide for curriculum planning which takes into account (1) the sequencing of educational objectives and organization of the instructional environment across the K-4 years, (2) planning procedures for the integration of objectives for development of knowledge and thinking abilities and (3) the need to personalize instructional objectives and organization to account for the varied backgrounds of Georgia's children.

Most of the ideas presented in this guide are not new, but teachers will need time to consider and integrate these ideas into their present curriculum practices. Teachers are **not** being asked to throw out what they are presently doing. Rather, they are asked to consider the continuum of child growth which occurs across the K-4 years in order to adequately select and integrate educational objectives from across subject matter areas and areas of thinking ability to develop units of activities based on the range of abilities, interests and development of the children in their classroom. Teachers who already use this approach to curriculum planning will find many practical suggestions in the guide to expand and vary their instruction. Teachers who are using primarily basal materials to teach will find useful suggestions for incorporating these materials into a broader, more comprehensive curriculum.

Teachers need your support to use this guide. They will need to have the assurance that they can be flexible in the use and organization of instructional materials as long as this instruction is accountable for children's growth. They will need **time** to plan. Classroom teachers have indicated they benefit from time to plan with other teachers in addition to having time to develop individually their instructional plans. You can further support your teaching staff by participating with them in an initial study of the guide. Evaluation checklists are located at the end of each chapter to assist teachers in a self-evaluation of their instructional practices. Having teachers respond to a checklist after reading a chapter is one way to prepare for faculty discussion of a particular topic. More specific suggestions for staff development are contained in the last chapter of the guide.

A basic tenet of this guide is that curriculum development must occur at the local school level if it is to adequately impact on classroom instruction. This guide is intended to support and encourage that development.

To the Classroom Teacher

This guide is designed as a resource for planning your daily classroom activities. The writers (many of whom are classroom teachers) know how busy your teaching day is, and have, therefore, attempted to include practical suggestions for implementation.

You will need time to consider, incorporate and revise the ideas presented in the guide. Two major concepts are presented for your consideration—implementation of an integrated approach to teaching and implementation of a personalized approach to teaching. Neither of these are new concepts for educators. Freidrick Froebel, Maria Montessori and John Dewey implemented them decades ago. Many teachers have received supervised training in the implementation of such ideas as "units of activities," development of "process objectives" (to account for thinking or learning-how-to-learn skills) and the development of classroom activities which are accountable for all areas of an individual's development (psychomotor, affective and cognitive).

The writers recognize that although these are not new ideas, too often exclusive concern for teaching subject matter has discouraged teachers from going beyond basal materials in their teaching. It is hoped the guide will offer practical support to those teachers who are already implementing or want to implement a more personalized and comprehensive educational program. Teachers implementing an integrated curriculum—one that accounts for all areas of development and the overlap of knowledge and processes of thinking across subject matter areas—need ideas and suggestions to keep their instructional program accountable for individual child growth.

This guide is intended as a starting point offering a framework of ideas to be adapted by individual classroom teachers to teaching styles and the needs of their students. We do not want or expect you to throw out any of the materials or ideas you are presently using.

The ideas presented on the following pages will help you to personalize your teaching. Use the evaluation checklists at the end of each chapter to review and assess your own teaching. Throughout your study of the guide challenge the ideas, challenge your instructional practices and above all challenge your students.

Introduction

All education springs from some image of the future and, indeed, so do most human activities.

Alvin Toffler
Learning for Tomorrow

Education is a lifelong process. At its best, education evolves as a seamless curriculum which, at times, is formal in nature, but much of the time is informal as it occurs in the multitude of experiences outside the formal school setting. Because each child comes to the classroom with a wealth of experience before entering the door, teachers need to account for these experiences as being a natural part of each child's lifelong learning process. In this way the teacher supports education as a seamless curriculum of experiences from birth to old age. This view of education is reflected in the Governor of Georgia's Policy Statement (1980).

> *The system of education should provide equality of opportunity for continuous growth of the individual. Sequentially developed learning experiences need to be provided to assure continuity of development in the cognitive, affective and psychomotor domains from early childhood into adulthood.*

How may the educator begin to anticipate the future experiences of students in order to educate these students for life in the twenty-first century? In this guide it is assumed that an awareness and understanding of the growing interdependence among nations and among all human beings for the sake of survival are vital to educating for the future. To support this idea, educational experience must be flexible, rich in choices and expandable beyond the confines of the school.

How was the guide developed?

Contributors to this guide come from a variety of educational backgrounds—classroom teachers, curriculum specialists and college instructors. This deliberate mix of backgrounds was called upon in both planning and writing the guide. It is hoped that this heterogeneous group has produced a document that is both practical for the classroom and challenging in its attempt to suggest alternatives for effectively educating our citizens of the twenty-first century.

The following three purposes were identified by educators as the major foci for the guide content.

1. To provide a framework for developing a K-4 curriculum
Because schools differ, differences should exist among their curriculum plans and their instructional policies. Educators may use this guide as a framework for the process of curriculum development in individual schools.

2. To provide a resource for developing and implementing an interdisciplinary approach to educating children
As curriculum specialists reviewed the listing of subject-area objectives identified in the state document *Essential Skills For Georgia Schools* (1980) they were reminded of the tremendous overlap between human knowledge and the various intellectual disciplines. These educators concluded that although the learning of basic skills is a foundation for all education, a focus on how to learn and the sources for independently gaining new knowledge are equally important. In other words, the thinking processes which make possible effective learning must be accounted for in all areas of education. Appendices B, C and D present a continuum of objectives for each of the domains (psychomotor, affective and cognitive). In Chapters Three, Four and Five practical suggestions for using these objectives in the planning process are presented. Suggestions are made for accounting for the overlap of objective across subject matter areas and how to merge these objectives with thinking process objectives. This approach to educational planning is referred to as an "interdisciplinary" approach and is viewed as an efficient and effective means of educating children.

3. To provide a model for relating curriculum objectives to knowledge of child development

Because the experiences of each learner are unique, teachers should expect and encourage a wide range of performance from students. In order to account for this range of performance and ability of students, teaching and learning must not be bounded either by the school's walls or by preconceived ideas as to what should be learned at a particular age. Rather, both teaching and learning must be guided by a careful study of children to determine their interests, abilities and levels of development, which in turn is used to select and develop educational objectives. In this guide educational objectives have been identified for each of the three domains of development—psychomotor, affective and cognitive. These objectives are presented on a continuum to assist teachers in identifying children's growth across a five year span. In Chapter One the reader may review specific growth characteristics of children to assist in determining the continuum of objectives and activities which are based on a knowledge of how children grow and develop. To further personalize an educational program, the educator may refer to Chapter Two for a variety of alternatives for setting up schedules and organizing the classroom. In Chapter Three ideas are presented for integrating subject area objectives and objectives from the psychomotor and affective domains with objectives for the development of thinking abilities. To further assist educators in using an integration of objectives, sample units of activities are presented in Chapter Four and Appendix E. These units were developed and field tested by classroom teachers. Basic to "personalized" instruction is the ability to assess and record student growth. Chapter Five is especially helpful for the classroom teacher as it presents a variety of practical, efficient ways to record student growth in the classroom. Chapters Six and Seven present additional suggestions for personalizing instruction by addressing practical means of involving parents in the educational process of their children as well as suggesting a variety of alternatives for assisting teachers in their professional growth.

How does the guide deal with the basics?

Because of the changing beliefs about cognitive development there has been a rush to place more and more formalized, rigidly structured content into the curriculum for young children (back to basics). Concerned educators have resisted changes directed toward fostering *only* the intellectual skills because they realize this does not serve to meet the total developmental needs of children. The basics of reading, writing and arithmetic certainly must be accounted for but, in addition to these, there are other basics that need to be addressed—the basics of efficient and refined psychomotor skills, and the thinking, social and emotional skills of adapting to an increasingly complex society. Until we have considered these "basics," education may be lost in the irrelevance of past knowledge rather than focusing on knowledge, attitudes and skills crucial for success in our future world. Throughout the guide practical suggestions are made to account for this expanded view of the basics of education.

How does a teacher try out an interdisciplinary and personalized approach to education?

The reader is encouraged to use the planning resources found in the K-4 guide. Read Chapter One dealing with the nature of the learner, then make careful observations of the children in your class or school. Determine individual maturation levels, personal needs and personal interests. Then explore and examine the domains and the list of processes found in Chapter Four. Consider how these may be used in your teaching. Knowledge of these basis elements is essential to maintaining and improving the educational effectiveness of Georgia schools. These elements allow integration of experiences for each child and allow the child to attach new meaning to an experience which gives it new interest.

Third, explore the sample units found in Appendix E. Examine carefully the planning processes used to merge the domains and objectives, resources, activities and methods of evaluation into an integrated unit designed to meet learner needs. Fourth, use one of the units presented in Appendix E in your classroom, adapting the objectives, activities and assessment to the needs of your group. Fifth, follow the planning process using your knowledge of the children to create integrated units of your own.

Using this guide as a model for development of school system guides

There are numerous ways to develop a meaningful curriculum guide. This handbook was written to be used as a model and modified to account for curricular needs unique to each school or school system. The following table presents the basic components that should be accounted for in the development of a curriculum guide.

Table One
Suggested Curriculum Guide Format

Concept	Objectives	Skills	Suggested Activities	Suggested Resources	Methods for Performance Appraisal
	General Objectives Enabling Objectives	Subject Area Thinking Study			

Glossary

Personalized curriculum. A plan for instruction based on an individual student's experience, interests, needs and learning styles.

Individualized instruction. Adapting the rate at which individual students proceed through instructional materials.

Processes. Ways people acquire, use and create knowledge.

Process categories. A grouping of thinking abilities for means of organizing instructional objectives, e.g., interpreting/analyzing.

Domains. Areas of growth and development, i.e., psychomotor, affective, cognitive.

Cognitive domain. The area of development dealing with the acquisition of knowledge across subject matter areas and thinking abilities.

Psychomotor domain. The area of development dealing with all observable voluntary human motion.

Affective domain. The area of development dealing with social and emotional growth.

Interdisciplinary approach. An approach to designing curriculum in which domains of development and thinking abilities are accounted for across content areas.

Integration. A merging of the three domains of development for a holistic instructional program.

Content areas. The subject matter areas.

Unit. A way of identifying objectives and organizing activities related to a particular theme in order to integrate instruction.

Unit theme. A central idea around which a unit is organized.

Assessment. Evaluating the child's development across the three domains.

Learning style. The consistent ways in which an individual responds to a wide range of perceptual and intellectual tasks.

Norm referenced test. Compares the individual's performance to a norm group.

Criterion referenced test. Compares the individual's performance to a specific set of criteria.

Learning center. A physical area in the classroom in which students may engage in learning activities related to a particular skill, concept or theme.

Seamless Curriculum. The sequence of educational experiences occurring throughout the life span of an individual.

Record keeping. The systematic recording of data which reflects the growth of children over a span of time.

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Chapter One

Personalizing Instruction— The Nature of the Child

The direction in which education starts a child will determine his future life.

Plato

15

Developmental Principles to Guide Curriculum Planning

To personalize instruction and provide the type of environment which maximizes growth and learning among all children, the teacher must have a knowledge of how children develop and learn. Program goals should be based on the child's individual needs. Activities should be provided which promote continuous growth within the domains of psychomotor, affective and cognitive development. Because each child is unique in terms of abilities, characteristics, interests and experience, general developmental principles should be kept in mind in determining the appropriateness of programs for young children. Table Two presents these developmental principles.

Table Two
Developmental Principles of Child Growth

- Each child is a unique and complex individual.
- The thrust of development is the integration and organization of experience—the need to find order. The need to organize experience while adapting to the environment is a basic need of all people and continues throughout life.
- Development is a total process through which children continually adapt to their environment and organize their experience. Resulting personal and cognitive structures are a synthesis of old and new experience.
- Although general growth sequences can be determined, children differ in their rate of development both in contrast to other people and within themselves. Each child has a pattern of growth which emerges at its own rate in a unique, sequential, continuous and cyclical pattern.
- Individuals function as self-integrated and organized wholes. Components of behavior must be understood in relation to the whole. The combination of psychomotor, affective and cognitive factors cause each child to respond to the same environment differently.
- A child's knowledge of the social and physical world progresses from knowledge about concrete things to abstract understanding.
- The emergence of skills, concepts, goals and behavior progresses from simple to more complex levels.
- The effects of maturation and learning need not be separated for the purposes of planning instruction.
- Social, emotional and physical environments influence all aspects of the child's development. Appropriate stimulation is desirable for optimum growth.
- Readiness precedes learning and is dependent upon the complexity of the task, the child's perception of need and developed level of maturity. Training without readiness is inefficient and may be harmful. Readiness cannot be forced although it can be stimulated.
- The child plays an active role in his or her own development; personal perceptions and goals increase learning behavior.
- Development and growth are influenced by many factors—biological makeup, previous experience, opportunities for learning, the culture in which one lives, the expectation of significant others, relationships with people and perceptual skills.

Ultimately, how well each child is understood and accepted as a unique person will determine the success of the teacher's efforts. The relationship between self-concept and achievement cannot be questioned. Young children also show a need to satisfy curiosity, be active, be independent, express themselves, get along with others and fulfill the expectations of significant others.

Developmental Characteristics With Implications for Instruction

Individual growth characteristics may be described within three areas of development referred to as "domains"—psychomotor, affective and cognitive. The division of individual growth characteristics into three domains is arbitrary, because children act and react totally. They are persons whose perceptions and actions are integrated into meaningful wholes. However, such a division does provide a means of studying aspects of development so that those responsible for planning learning experiences can observe children as uniquely developing individuals. The wide range of individual differences must be considered in educational planning. In looking for patterns of growth the teacher should keep in mind an essential point—**norms are averages and not ideals.** Variability should be not only expected but encouraged.

The following tables emphasize the fact that children grow at different and uneven rates. Although the majority of children in a classroom may be identified with one set of characteristics, other children may be identified with characteristics representing earlier or later maturity levels. Consequently, the teacher should be familiar not only with the characteristics which most closely describe the age group of the students, but with the entire range of characteristics for that group of students. It is this range of child characteristics that provides the teacher with workable, practical understanding to be considered in planning educational activities for children.

Tables three, four and five each include a description of general characteristics for one of three age groups—4-6, 6-9 and 9-11. As one considers the range of characteristics for children ages 4-11, it is important to know that any one classroom of children K-4 is a developmentally heterogeneous group which may reflect a developmentally maturation age range of 4-11 years.

Table Three
Developmental Characteristics of Children Ages 4-6

Psychomotor Characteristics	Psychomotor Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Extremely active, easily fatigued; often shows fatigue by being cross or restless.	Physical activity, frequent rest periods; opportunities to use energy.	Plan individualized and group activities which alternate quiet and active periods; anticipate problems; plan for free play; plan for ample running games.
Restless; tires of doing any one activity for extended periods of time.	Activities requiring different levels of concentration and types of involvement.	Vary grouping patterns; implement planned schedule flexibily; prepare interesting, short "extras"; plan frequent play periods.
Developing small muscle control more slowly than large muscle coordination.	A variety of movement and manipulative experiences.	Provide individual and group activities involving large and small muscles; begin with exercises and rhythmic activities good for the whole body; limit time spent on activities requiring fine eye-hand coordination.
Physically flexible and resilient; skull bones remain soft.	Activities which are appropriate to developed skills of coordination.	Plan activities suited to the range of motor capabilities within the class; set clear limits to behavior in games and activities; provide class supervision.
Girls are more skilled at motor tasks.	Motor tasks suited to personal skill level.	Plan for a variety of activities with different demands on coordination; avoid boy versus girl comparisons or competitions.
More interested in manipulation and movement than in product produced or ideas involved.	Opportunities for active participation.	Deemphasize relative quality of finished product; avoid comparisons; provide activities which do not always result in a product; don't insist on perseverance or completion of all activities; ask questions to extend the value of the activity.
Quite likely to be far-sighted; focusing on small objects is gradually becoming less difficult.	To avoid eye strain.	Plan activities requiring a minimum of close visual scrutiny (e.g. copying from chalkboard); eliminate very small objects if magnification is not provided; insist on books with slightly enlarged print.

Affective Characteristics	Affective Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Demonstrating a decided preference in handedness.	Practice in refining small muscle control.	Offer a variety of activities requiring the use of the small muscles for both the writing and nonpreferred hands; avoid insisting on handedness.
Capable of most self care.	Opportunities to demonstrate independence.	Plan activities to develop self care skills as needed; encourgage the sharing of learned skills between peers; allow children to assume as much responsibility for themselves as possible; discuss the rules related to good health.
Self-contained; self-sufficient.	Experiences to support a growing sense of independence.	Appreciate each child's warm uninhibited nature and reciprocate in the same manner; provide sufficient encouragement, ample praise, warmth and patience; plan for a variety of child-selected activities.
Eagerly exploring social relationships and all available.	Experiences to support personal interest and initiative.	Trust in children's desire to want to learn; plan ample child-selected activities; provide firm limits but freedom within limits.
Seeking attention of peers and adults; likes to be first.	Recognition; acceptance; status within group; positive satisfaction of needs.	Give affectionate attention to each child daily; provide individual help and attention as needed; provide sufficient activities so that each child can have a turn; use equitable techniques in daily routines (e.g., helper selected in alphabetical order); provide time for sharing experiences.
Expressing feelings openly; disagreements are of short duration.	Opportunities for successful peer interaction; security.	Encourage awareness of other children's feelings; state expectations and limits clearly; make limits reasonable; guide child to help maintain control as necessary; supervise closely as situations can deteriorate rapidly.
Imaginative.	Interaction with ideas and language of peers; experimentation with roles; help with irrational fears.	Provide simple props and time for imaginative play; allow children to face fears through observing others; provide verbal support; provide security in daily schedule by using simple, clear routines; draw distinction between reality and fantasy with stories, films, music, etc.

Cognitive Characteristics	Cognitive Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Becoming aware of personal sex role.	To avoid occupational stereotypes.	Make all activities available to both boys and girls; refer to people as persons (e.g., salesperson); discuss occupations as being open to both men and women.
Generally aware that others have rights; physical aggression may be used to settle disputes.	The attention of peers.	Encourage peer interaction and self-esteem by using positive reinforcement in the settling of quarrels; set clear limits to behavior; intervene only when necessary; redirect behavior; isolate to lessen stimulation as needed; accept child, not behavior.
Usually eager to conform to social expectations.	Adult approval.	Limit choices as necessary; provide supervision (continuous).
Likely to change friends rapidly; social groups are flexible.	Work and play in small group settings.	Provide many individual and small group activities; identify isolates (using e.g., the sociogram); aid children in making friends if necessary; reorganize play groups as necessary.
Often seeking immediate gratification; experiences difficulty in making too many decisions.	Reasonable opportunities for decision making.	Limit choices as necessary to allow assuming responsibility without undue pressure.
Organizing learning through sensory experiences; learns best through active participation.	Sensory input.	Provide concrete learning experiences which require active, direct participation.
Continuing to acquire information, labels.	Opportunities to enrich repertoire of experiences and vocabulary.	Plan varied experiences and opportunities to explore environment, gain information, and share ideas with others; use stories, pictures, films, trips, TV, etc. to expand experiences; provide accurate labels for objects and experiences.
Thinking mainly in the present; thinking is limited to actual experiences.	Varieties of learning experiences.	Provide an environment rich in experiences to stimulate interest; base instruction and discussions on experiences.
Curious about environment; imaginative; inventive.	Information; opportunities to explore.	Plan time for self-directed activites; allow flexible use of materials.
Responsive, easily distracted.	Minimum interferences when absorbed in learning tasks.	Plan large blocks of time which allow for absorption, completion of tasks; use centers to focus attention and limit stimuli.

Cognitive Characteristics	Cognitive Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Talkative.	Acceptance; practice in self-expression; opportunities to talk as well as listen.	Encourgage the use of listening and speaking skills in total group, small group and individualized activities; support "sharings" with the full attention of adults to encourage good listening habits.
Interested in the present and immediate; interested in knowledge that is practical and accurate; asks questions that are purposeful and relevant.	Answers to questions.	Relate all experiences to what is already known; answer questions simply and discuss, then stimulate further thinking; reply "I don't know" when appropriate and help child find answers to questions.
Using varied sentence patterns; articulating clearly; possesses a vocabulary adequate to express thoughts.	Opportunities to elaborate language and refine verbal skills; to hear and use language in many ways.	Encourage verbal exchanges; model correct grammar and usage; help the child who has difficulty with self-expression.
Imitating adult behavior and interests (e.g., hobbies, books, reading.	Exposure to a variety of models.	Encourgage the participation of a number of different adults and older children in classroom.

Table Four
Developmental Characteristics of Children Ages 6-9

Psychomotor Characteristics	Psychomotor Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Extremely active; enjoys activity for its own sake but tires easily.	Opportunities to use energy constructively; frequent change of pace.	Alternate active and sedentary activities; plan for physical activity in and outside of classroom; allow children to move around in the room.
Establishing eye-hand coordination; boys may have more difficulty in manipulating small objects.	Variety of manipulative experiences.	Gradually increase work which requires concentration and precision.
Better coordinated; enjoys stunts; may overestimate physical skills.	Activites which are appropriate to skills of coordination; close supervision.	Plan games which are safe but require maximum physical involvement; help awareness of physical limitations.
Still far sighted, eye-hand coordination may lag until a child is about eight years old; may have difficulty focusing on small oojects.	To avoid eye strain	Avoid requiring too much reading or close visual attention at one time; watch for signs of eye fatigue.
Most susceptible to common childhood illnesses.	To learn practices for maintaining health.	Teach the practice of preventing illness as well as good eating habits and recognizing the signs of illness; allow time in daily schedule to work with absentees.
Interested in accomplishment; enjoys responsibility; may hurry through work.	Opportunities to demonstrate industry.	Praise accomplishments; tailor assignments to reachable levels; provide assistance as needed to assure satisfaction from performance; allow enough time to complete assignments; help with proofreading, recopying and perseverance as needed; provide ample activities.
Sensitive to criticism and ridicule; concerned about being good; begins to show self-criticism.	Frequent praise and recognition.	Aid the development of self-confidence by discussing earned successes; give frequent feedback and reassurance; avoid using sarcasm and ridicule; correct privately, help with manners, habits, desire to be right.
Learning to delay gratification by exercising self-control.	Positive reinforcement for exercising control.	Praise patience; discuss goals and goal setting; provide ample choices.

Affective Characteristics	Affective Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Eager to please adults yet tests limits.	Approval and independence.	Provide approval and affection for achievements (in all areas); provide fair and firm limits; allow choices; allow children to experience the consequences of their actions; avoid group punishment; disapprove of behavior, when necessary, not the child.
Becoming more self-assertive; words begin to replace physical aggression, especially in girls.	To learn acceptable ways of getting attention and working with others.	Provide leader and follower experiences; intervene before quarrels become feuds; discuss peaceful means of settling disputes.
Applying the letter of the law by literally interpreting rules, emphasizing fairness; tattles.	Clear limits; simple rules; experiences in playing fairly.	Clarify limits; keep groups small and flexible most of the time; be reasonably sympathetic to complaints; draw a distinction between tattling and information needed to prevent injury; don't accept gross exaggerations.
Wanting to belong to groups, but groups remain flexible; more selective of friends; beginning to select "best" friends.	Successful experiences in making friends.	Use sociograms to identify isolates; discuss ways in which friends are made; guide individuals as needed.
Beginning to play organized, simple games but not always by formal rules; boys and girls begin to have different interests.	Ideas for games; participating in self-selected groups when appropriate.	Provide ideas for games and needed equipment; discuss rules of fair play; ask for agreement to clearly stated rules before play begins; plan activities which are not highly organized and are of short duration.
Interested in competition; boasting is common; varies in ability to play in groups.	Success.	Avoid the use of comparison and competition; encourage competition with self and previous performance.
Generally tolerant of others unless influenced by adults.	Flexible social groupings.	Form groups based on interests; discuss the common needs and desires of all people.
Requiring successful and satisfying learning experiences in order to continue interest.	Experiences to build self-esteem; must view self as a successful learner.	Assign tasks that can be accomplished; personalize expectations and use a variety of materials and strategies to assure success; give simple, clear directions.

Cognitive Characteristics	Cognitive Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Generally extremely eager to learn; is curious and less distractable.	Information and labels.	Support built-in motivation by making demands which can be met successfully; minimize distractions.
Becoming more goal directed in learning; more interested in the product.	Experiences in achieving goals.	Structure learning experiences for success and satisfaction; provide only as much guidance as is necessary to assure satisfaction; increase responsibilities of child to successful coping levels; set goals cooperatively and involve group in planning.
Synthesizing information by categorizing and classifying experiences; uses inductive reasoning.	Opportunities to organize information.	Emphasize both concepts and vocabulary as information is gained and organized; work from smaller examples to larger concepts; provide activities which require thinking.
Demonstrating some abstract thinking (ability to generalize); thinking involves reasoning by analogy to actual experience.	Opportunities to develop reasoning abilities.	Work from concrete experiences; use analogies in class discussions.
Recalling sequences successfully (numbers, letters, time); reasoning becomes more apparent.	Opportunities to demonstrate capabilities.	Plan learning experiences which apply knowledge in practical, concrete situations.
Learning best through active participation with concrete materials especially if learning new concepts.	Variety of concrete learning experiences.	Provide a variety of concrete materials on a variety of difficulty levels; introduce processes gradually (classification, seriation, hypothesizing.)
Lengthening attention span; resents being disturbed at play or work if interested.	Time for involvement and mastery.	Provide an environment which allows concentration, is without too many sensory stimuli; provide ample time for completion of tasks; plan a flexible schedule and be prepared to change activities.
Understanding language ahead of ability to use language; speaks more fluently than writes; is learning the power of words; experiments with vulgar speech.	To extend oral and written language skills.	Plan many opportunities requiring use of listening, speaking, reading and writing skills; strengthen and expand vocabularies; accept child when rejecting the use of vulgar language.
Eager to share ideas; assertive; likes to talk and answer questions even if information is erroneous.	Opportunities to share ideas.	Encourage sharing between verbal and less verbal children; insist on taking turns when speaking.

Table Five
Developmental Characteristics of Children — Ages 9-11

Psychomotor Characteristics	Psychomotor Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Likely experiencing a growth spurt, especially if female; many girls reach puberty.	Information and assurance.	Provide reassurance that growth rates do vary; determine the school's sex education policy and, if allowed, provide answers to questions in an unemotional manner.
Well coordinated in fine motor skills.	Opportunities to demonstrate motor skills.	Provide manipulative experiences through construction projects, arts, crafts.
Continuing growth of bone structure; boys are eager to demonstrate manliness.	Opportunities to test newly acquired skills of coordination, to avoid heavy pressure on bones and muscles.	Substitute agility matches for tests of strength and endurance; discuss damage which could result from battles.
Usually experiencing good health and boundless energy.	Information about practices which maintain health.	Instruction in health and physical education should include an emphasis on preventive health practices, especially good eating habits.
Increasing in ability to make decisions and assume responsibility for the consequences.	Opportunities to assume responsibility.	Allow class members to help in setting standards, schedules and planning learning experiences.
Perhaps setting unrealistically high personal standards for performance which may lead to frustration and guilt; easily depressed or excited.	Recognition; a sense of achievement.	Allow the testing of capabilities by sequencing the level of difficulty and beginning with simpler tasks which will bring success; help individuals set realistic goals for themselves; guide acceptance of success and failure.
Apt to occasionally display disorganized, unpredictable, inappropriate behavior.	Adult support and guidance.	Accept erratic behavior and resulting mistakes.
Understanding the rationale behind rules; strong sense of justice; recognizes motives quickly and is hard to deceive.	Opportunities to share goals.	Discuss the necessity for rules and laws; discuss the importance of goals as motives for behavior; discuss specific acts as they occur, generalize rules from actual experience.
Developing interests which separate boys and girls.	Freedom to develop interests and talents.	Avoid comparisons and intergroup competitions.

Affective Characteristics	Affective Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
More selective in choosing friends; relationships are intense.	Acceptance by peers who are admired.	Individuals may require help in making and keeping friends; allow friends to work together on projects at times.
Worshiping heroes and experiencing crushes; interested in other people's ideas and beliefs.	Models for behavior.	Provide time to share interests in people; reading should include biographies.
Beginning to replace adult approval with peer group for standards of behavior and recognition; may participate in antisocial behavior to please peer group; may rebel against adult domination.	Peer group recognition and membership; independence.	Read and discuss stories of common ethical problems facing young people; encourage thinking; discuss motives for behavior; use fair, consistent control with classroom participation in establishing standards; avoid obvious grouping problems (sex, race, ability); mix members of unfriendly cliques on projects accept the child and motives, not the behavior; use problem solving techniques instead of isolation.
Interested in organized competitive team games; class spirit becomes stronger.	Identification as a member of a group.	Use group motivation, consensus; put classroom spirit to work on constructive projects; organize games with rotating team members.
Enjoying intellectual challenges.	Varying kinds of mental stimulation; freedom to explore and experiment.	Provide a wide range of experience; encourage individual intellectual pursuits; encourage but not force perseverence, as a wide sampling of interests is desirable.
Gaining satisfaction from tasks well done; enjoys cooperative group enterprises.	Frequent recognition and praise.	Tailor tasks to individual interests, skills and abilities; provide only as much help as is needed; recognize achievements; praise creative efforts.
Curious about everything; interested in extending knowledge beyond home and local community; begins to form collections.	Opportunities to demonstrate initiative; variety in learning experience; answers to questions.	Encourage explorations; excessive use of "find out for yourself" may kill interest; reply "I don't know" when appropriate; encourage the "expert" to share knowledge; make room for collections; point out time-space relationships.

Cognitive Characteristics	Cognitive Needs	Implications for Instruction
The child is . . .	***The child needs . . .***	***Adults should . . .***
Interested in concrete learning experience and the learning of specifics; reasons best inductively.	Opportunities to demonstrate and share knowledge and insights.	Provide varied concrete learning experience and labels; plan activities which allow the use of insight in solving problems.
Generalizing previous experience.	Continued exposure to a variety of experience.	Allow time for integrating concepts; allow for a student's repetition of experience as needed.
Beginning to construct theories and to make logical deductions.	An introduction to higher-level strategies of inquiry.	Introduce the strategies of inquiry gradually; provide for the learners who will require more concrete experience.
Capable of attending to tasks with varying degrees of concentration; some children can attend to tasks for long periods of time.	Some opportunities to plan own time schedule.	Allow self-determined pacing during independent work periods; develop individualized work schedules as needed.

Table Six:
Characteristics of a Responsive Environment

Psychomotor Domain

All learners require . . .	*Children 4-6*	*Children 6-9*	*Children 9-11*
Space and time for constructive use of energy.	Learning centers fill the entire room.	Learning centers are used in no less than one-third of the available space.	Learning centers are used in no less than one-third of the available space.
	Frequent changes of pace are planned: sedentary/active, quiet/noisy.	Frequent changes of pace are planned: sedentary/active, quiet/noisy.	Time periods are extended with fewer changes.
	Children move about the classroom the majority of the day (up to 90 percent).	Provision is made for movement during sedentary activities.	Provision is made for movement during sedentary activities.
Demands on attention which do not exceed ability to attend.	Total group activities are kept short.	Total group activities are kept short.	Time in total group may be lengthened especially for planning purposes.
	Time for rest is provided daily.	Time is planned for relaxed, informal, quiet activities.	Time is planned for relaxed, informal, quiet activities.
A variety of motor experiences.	Particular emphasis is placed on gross motor activities.	Particular emphasis is placed on small muscle development.	Motor skills are used and applied in other tasks.
	A variety of motor skills to develop large and small muscles is provided.	A variety of motor skills to develop large and small muscles is provided.	Help is provided as individually appropriate.

Affective Domain

All learners require . . .	*Children 4-6*	*Children 6-9*	*Children 9-11*
Individual recognition and acceptance.	Time is planned for daily sharing of experiences and interests.	Time is planned for daily sharing of experiences and interests.	Sharing is incorporated into the planning and sharing of projects.
Success.	Tasks are personalized to child's ability to perform.	Groupings remain flexible.	Groupings remain flexible.
	Verbal recognition is given achievement.	Verbal recognition is given achievement.	Written comments are added to verbal recognition.
	Activities are offered on a variety of difficulty levels.	Activities are offered on a variety of difficulty levels.	Activities are offered on a variety of difficulty levels.
Tasks which develop independence.	Room helpers are selected equitably.	Class members decide on a method of selection.	Class members decide on a method of selection.
		Use of contracts is introduced.	Use of contracts is introduced.
			Students plan their own schedule during independent work times.
Status within peer group.	Planned varieties of grouping patterns are used each day.	Planned varieties of grouping patterns are used each day.	Planned varieties of grouping patterns are used each day.
	Child-selected groups are used.	Child-selected groups are used.	Many chances for self-selected groups are provided.
Opportunity to assume responsibility.	Clear, simple statements of rules and limits are developed, discussed and displayed.	Clear, simple statements of rules and limits are developed, discussed and displayed.	Class participates more actively in setting rules.
	Choices in activities and behavior are limited to success levels.	Choices in activities and behavior are limited to success levels.	Choices for activities are expanded.

Affective Domain			
Adult support and guidance.	Attention is given each child each day. Positive reinforcement is used. Rules are fairly and consistently applied.	Attention is given each child each day. Positive reinforcement is used. Rules are fairly and consistently applied.	Attention is given each child each day. Positive reinforcement is used. Class participation is used in establishing consequences.

Cognitive Domain			
Sensory, concrete experiences.	A variety of modes is used in presenting information.	A variety of modes is used in presenting information.	A variety of modes is used in presenting information.
	A variety of modes is used in available learning activities.	A variety of modes is used in available learning activities.	A variety of modes is used in available learning activities.
Information, ideas, labels.	Maximum use of resources is planned (media, people and actual visits).	Maximum use of resources is planned (media, people and actual visits).	Concrete experience continues to be available.
Extension of language skills.	Speaking and listening are emphasized.	Reading and writing are added to practice in listening and speaking.	Reading and writing are added to practice in listening and speaking.
	Practice in the use of language.	Practice in the use of language.	Practice in the use of language.
		Instruction in the basic skills is provided at success levels.	Instruction in the basic skills is provided at success levels.
Answers to questions, problem solving.	A variety of topics, methods and materials stimulate interest (e.g., experiments, demonstrations, unfinished stories).	Questions are posed from classroom experience.	Topics for problem solving reach beyond the classroom.
	Class discussions are used.	Class meetings are scheduled.	Class meetings are scheduled.
	Adult questions stimulate curiosity.	Questions for independent inquiry are provided.	Questions for independent inquiry are provided.
Opportunities to explore and create.	Many materials are provided and flexibility in their use encouraged.	Many materials are provided and flexibility in their use encouraged.	Methods of sharing information are innovative and flexible.

Picking Up Cues from Children

Teachers should use their knowledge of children to develop activities that are relevant to each child's needs, interests and growth. Information about children may be gathered in numerous ways both formal and informal. The variety of assessment techniques will be discussed in detail in chapter six. It is important for teachers to realize that much of the important information used in day-to-day planning is gained via teacher observation and interactions throughout the school day. Table Seven presents a variety of ways in which teachers may pick up cues which are important for planning future activities.

Table Seven
Picking Up Cues from Children

Child Information	Cues From Children	Additional Methods the Teacher Might Use
Interests	Remarks, collections, hobbies	Interest inventories
Knowledge, experience	Participation in discussions and planning	Class work, tests
Developmental needs	Classroom behavior, playground behavior	Developmental screening tests, checklists, parent interviews
Self-perceptions	Classroom behavior, playground behavior	Individual conferences
Learning style	Selection of activities for completion, diary of reflections on work	Special evaluation of preferences in self-selected activities

As teachers increase their understanding of development and behavior they are better able to offer the kinds of experiences that children need to develop to their potential. The teacher's challenge is to provide a match between each child's unique pattern of growth and available resources for the further enhancement and stimulation of learning.

Identifying and Providing for Children with Special Needs

The Georgia Board of Education has adopted a policy of providing a free appropriate public education opportunity to all handicapped children. *(Georgia Special Education, Annual Program Plan, Public Law 94-142, DRAFT, for Fiscal Year, 1979.)*

Recognition of Need

Recognizing those children who are not succeeding at activities already provided in the classroom is a first step toward the recognition of specialized needs. The teacher should then carefully observe and assess the child in an attempt to determine the cause of the child's lack of success in these activities. At early ages, lack of success in school-type activities may appear as a developmental lag, a lack of experience or a social/behavioral problem. Careful observation identifies the point at which each child succeeds and the point at which more attention is needed.

Working with Parents

Basic educational activities in the home, such as cutting, pasting, matching, talking, listening and getting along with other children, may provide needed practice for the child. Through parent-teacher communication, parents may become aware of their importance as the first educators of their child. If these basic activities have not been mediated for the child in the home, there is a good chance the child may appear "behind" other children in school. The early childhood curriculum may be able to overcome this lack of experience in the home, depending on the severity of the deficit. In any case, the importance of working with parents to assist them in contributing to the maximum development of their child cannot be overestimated.

Role of the Teacher

The teacher's role is crucial in providing (1) appropriate school experiences in which the child can succeed and (2) adequate diagnosis of need. The teacher must always be wary of labeling children. As described earlier in the handbook, effective teaching

- gives children ample opportunity to succeed in a range of activity and materials;
- continually assesses progress along the continuum of growth domains;
- encourages success by matching levels of development with the levels of activity provided;
- assumes children enrolled in any early childhood program will represent a range of developmental differences.

Teachers provide a model of acceptance or rejection of a child for the rest of the children in the classroom. When the teacher responds to a child as being clumsy, disruptive, unable to succeed or demanding of teacher time, this misunderstanding will most likely be shared by children in the room. On the other hand, when the teacher treats the child as challenging and capable of success at some level, others will be convinced of this as well.

Making Appropriate Referrals

When diagnostic teaching based on child observations and parental communication do not increase a child's performance, appropriate professional referral becomes essential to determine how and where the child may be best taught. Working with school system personnel to confirm exceptional need is most important. In Georgia, children with special needs beyond the average population include those who are mentally retarded, hard of hearing and deaf, speech impaired, visually handicapped, seriously emotionally disturbed, multihandicapped, hospital/homebound, deaf-blind, have specific learning disabilities, and gifted. Appendix A presents lists of definitions and resources available from the Georgia Department of Education.

Following a diagnosis of exceptional need by school system personnel, recommendations for work with that child in the classroom may include

- allowing additional time for the child to complete activities;
- providing special equipment to complete activities (e.g., special magnifying devices for sight or hearing);
- providing a special setting for increased interaction between the adult and child.

Communicating Special Needs to Other Children

Teachers should openly talk about exceptional needs with the other children in the classroom. All children need to feel they are a vital part of the class and can participate to the best of their ability in classroom activities.

Like adults, some children tend to overprotect children with special needs. Children need to understand the circumstances surrounding the special condition of a child and learn how to work constructively with that child. Understanding that these children should be independent in their classroom interactions is extremely important. Special accommodations may be needed for them.

Understanding how each individual in the classroom can function most helpfully under these conditions will set the stage for a maximum learning environment for all children.

- Many handicapping conditions are reversible.
- The earlier the recognition of and provision for a special need, the better the chance of making school success possible for the child.
- Diagnostic teaching is necessary to identify and significantly affect any special need a child may have.
- Avoid labeling.
- Every child, no matter what his or her level of development or condition, needs to experience support and success in the classroom.

Program Evaluation Checklists

Please use the program evaluation checklists at the end of each chapter to evaluate and personalize your program. Combine this checklist with the other checklists found at the end of each chapter. Each item on the checklist is to be marked either YES or NO, and space is provided for your comments in order to indicate further needs. Responses may vary greatly. These checklists are provided to assist you in personalizing your own professional growth.

Program Evaluation Checklist
Child Growth and Development

	Yes	No	Comments
1. The current instructional program is based on knowledge of general developmental characteristics of			
A. age group teacher works with.	☐	☐	
B. younger age groups.	☐	☐	
C. older age groups.	☐	☐	
D. changing characteristics of children.	☐	☐	
2. The planning process includes			
A. selecting objectives based on • *results of evaluations.* • *sequential skill development.* • *children's observed activity.*	☐	☐	
B. developing learning environments, learning activities and centers • *needs of a group of children.* • *need of a particular individual.*	☐	☐	
C. consideration for incorporating all three areas of child growth *(psychomotor, affective, cognitive) in each activity.*	☐	☐	
3. Learner needs are considered through			
A. space and time for constructive use of energy.	☐	☐	
B. demands on attention (not to exceed ability).	☐	☐	
C. a variety of motor experiences.	☐	☐	
D. sensory, concrete experiences.	☐	☐	
E. information, ideas and labels presented.	☐	☐	

	Yes	No	Comments
F. extension of language skills.	☐	☐	
G. answers to questions, problem solving.	☐	☐	
H. opportunities to explore and create.	☐	☐	
I. individual recognition and acceptance.	☐	☐	
J. experience in success.	☐	☐	
K. tasks which develop independence.	☐	☐	
L. status within peer group.	☐	☐	
M. opportunity to assume responsibility.	☐	☐	
N. support and guidance by adults.	☐	☐	
4. A variety of methods are used to determine developmental levels.			
A. children's comments.	☐	☐	
B. materials brought from home.	☐	☐	
C. classroom behavior and participation.	☐	☐	
D. evaluation of class work.	☐	☐	
E. interest inventories.	☐	☐	
F. parent interviews.	☐	☐	
G. sociograms.	☐	☐	
H. individual conferences with learner.	☐	☐	
I. observation of preferences in self-selected activities.	☐	☐	
J. developmental screening tests.	☐	☐	
K. on-going assessments.	☐	☐	
L. discussion with other professionals.	☐	☐	

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Chapter Two

Personalizing The Learning Environment

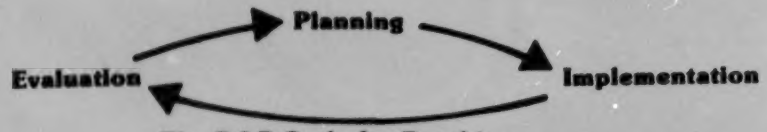
There are no perfect blueprints; there are only sketches. Each group develops its own design.

Nagol

The Teaching Process

This chapter on personalizing the learning environment considers the most practical aspects of planning and organizing the classroom. It is the teacher's ability to use information in the classroom that allows for true personalization of instruction.

A successful learning environment meets children's needs and interests. In order to accomplish this goal, the teacher must assume an active role with children. The teacher actively plans, implements and evaluates the learning environment each day. Thus, the teacher provides a cycle of teaching activity. Planning determines implementation of the program. Implementation is measured by evaluation, which is the basis for planning, as illustrated in the following diagram.



The P I E Cycle for Teaching

Planning

Both long-range and daily planning help assure maximum child growth and development. The teacher uses planning to organize larger units of activity for children (e.g., experience with animals, taste, color), to organize materials and equipment in advance (e.g., films, paints, books), and to provide an overall framework for selecting and developing objectives and activities for children's growth.

By scheduling daily planning times, both the teacher and the teacher assistant can participate in organizing the next school day. During the planning sessions, the teaching staff should

- review and record child responses and growth within the classroom environment;
- review the organization of materials and centers;
- review the children's use of equipment and materials;
- identify specific objectives, from a continuum of objectives, which will reinforce and extend children's growth and learning;
- develop classroom organization and activity to promote children's growth;
- select methods for recording children's performance within active learning settings.

Consistent planning provides for the following.

- Physical, intellectual and affective areas of children's development.
- Individualized needs of children.
- Children's past experience in and out of school.
- Children's involvement in the planning and assessment process.
- Supportive interaction between adults and children.

Implementation

Teachers and children work together in implementing the program. Implementation will be based on the planning concerns listed in the previous section.

In meeting the needs of the physical, intellectual and affective domains of children's development, the adult will

- use specific activities to meet specific program objectives in the area of development;
- use activities which integrate growth (e.g., a cooking activity in which children (a) measure - intellectual growth; (b) use the egg beater - physical growth; (c) participate with other children in planning activity - affective growth).

In meeting the individualized needs, the adult will

- observe and interact with individual children;
- give suggestions to a child needing help;
- assist children in evaluating their own work;
- record a child's progress.

In using children's past and present experiences, the adult will

- provide activities in which children practice skills previously learned;
- use past experience (e.g., language, travel, food consumed) as a background for learning;
- develop the physical environment (e.g., bulletin boards, books, equipment) to reflect the children's cultural background;
- use children's out-of-school interests (e.g., TV programs, toys) as themes for activities.

By involving children in the planning and assessment process, the adult will

- provide whole group, small group or individual time for children to talk about what they have done in the classroom;
- encourage children to suggest activity themes and materials to include in the classroom;
- provide opportunities for children to develop guidelines for participation in learning activities.

In supporting interaction between the teacher and child, the adult will

- listen to children's ideas;
- verbally acknowledge and reinforce children's activity;
- accept the language and ideas of children;
- extend children's ideas by adding information to the experiences they discuss.

Evaluation

The evaluation phase of the program involves both teaching staff and children. As children become more involved in planning activities, they should actively assess those activities they have planned. For example, (at the social studies center)

Student: I like working with salt-dough and making this map of Georgia.

Teacher: I'm glad. You are making a relief map to show Georgia's farmlands, rivers, fields and rolling hills! Why are you making this part of your map bumpy and uneven? (pointing)

Student: To show the mountains.

Teacher: Where are the mountains in Georgia?

Student: In the northern part of the state.

Teacher: Is there some other way to show that these are mountains?

Student: I guess I could paint the mountains gray.

Teacher: Yes, that would help people understand your map. Are you going to put mountains all over the state?

Student: No, the farmlands and seacoasts are flat. I've been to the beaches.

Teacher: Could color help you show these differences? Tell me about the beach . . .

Individual, small group and large group settings can be used for evaluation purposes. Positive, honest and open feedback to children is important.

The continuum of program objectives establishes the basis for on-going evaluation. A systematic record of children's growth assures a proper match between program activity and child growth. More specific recommendations for record keeping and evaluation are contained in Assessing Child Growth.

Scheduling

Providing For Time Flexibility

A schedule of activities is very much a part of planning for teaching. Children (and adults) need to work within an established framework. The flexible schedule provides this framework and at the same time allows for a sensible balance of activities. Children frequently become engaged in an activity and need some additional time in which to complete it. A flexible schedule provides this time without upsetting the routine or causing another activity to be neglected. Changes in the daily schedule should be based upon the needs of the children as much as possible. A flexible schedule provides for effective time management. Activities requiring a large span of time are not forced into small time blocks. Little time is wasted by children waiting for an activity to begin. The effective use of available space and materials is enhanced by a well-established and flexible schedule.

Several factors are involved in the development of a workable schedule — philosophy on which the program is based, developmental needs of children, class size, size of room, length of school day, physical facilities, and perhaps most significant, resourcefulness of the staff. Teachers must operate within a method that is compatible with the philosophy of the curriculum. A sharing of philosophies among the entire faculty will ensure the development of a schedule acceptable to all involved. The continuum of development of children given in chapter one will assist in making decisions about length and number of activities to be undertaken during a day. The class enrollment must be taken into consideration when establishing a schedule — larger groups of children generally take longer to complete an activity. The length of the school day is also a factor influencing the schedule — a longer day will allow for larger blocks of time. The physical facilities of the school, including its location, the indoor and outdoor environment and access to them will be determining factors in schedule planning. Other important considerations are the curricular design (in this case, an integrated curriculum) and the instructional program. The factor that will most influence the workability of any schedule is the competence and resourcefulness of the staff. It is imperative that the entire staff have a clear understanding of the schedule — how it was developed, its components and the purposes and philosophy by which it was established.

Although consistency in schedules is important, changes are sometimes necessary and should be effected when either formal or informal evaluations of the program and its operations warrant. Schedule changes should be thoroughly explained to the students in terms of purposes, specific changes and effects. When possible, the children should be involved in the evaluative and development processes.

Some indications of a need for changing the schedule include excessive waiting on the part of the children,increase in disruptive behavior due to boredom, inability to complete tasks in the allotted time and neglect of various curriculum areas.

Program scheduling for young children must meet the developmental needs of these children, the increase in maturity levels as the year progresses and the physical structure of the classroom. Developmentally, young children respond best to programs that provide a balance between

- exploration/discovery and group activities;
- individual activities and group activities;
- creative arts and academic fields;
- being listened to and listening;
- vigorous play and less active play;
- large muscle activities and small muscle activities;
- first hand experiences and vicarious experiences;
- outdoor activities and indoor activities;
- the three domains.

An adequate balance of activities will encourage children to participate in self-initiated and self-regulated activities. Within the limits of the environment structured by the teacher, the child learns to make independent choices and to take independent responsibility for completing the activity.

The following program schedules are presented for your consideration. Modification of any of these schedules is encouraged to assure maximum flexibility in relating to children's needs. Specific times are not indicated. As much as possible, large blocks of time should be used for program activities, because the time allotted for any activity will vary from day to day. A flexible schedule will allow for this variation.

Schedule Models

Time Block Model
(based on a six- and one-half or seven hour day)

one hour	Children arrive Breakfast Limited center work
one hour	Total group experiences Outside activities
two hours	Center activities Small group and individual study and work
one hour	Lunch Quiet activities
90 minutes	Teacher directed center activities Cleanup
30 minutes	Wrap up conversation Planning

Time Block Model
(based on a six- and one-half or seven hour day)

one hour	Arrival of children Planning with teaching team members Conversation
one hour	Breakfast Quiet activities
one hour	Total group experiences Story
90 minutes	Outside activities Planning Small group activities
30 minutes	Lunch
two hours	Center activities Small group and individual work
30 minutes	Wrap up Conversation Planning with teaching team members

Time Block Model
(based on suggested daily schedule of double session kindergarten - three hours)

Morning Session (8:30 - 11:30)

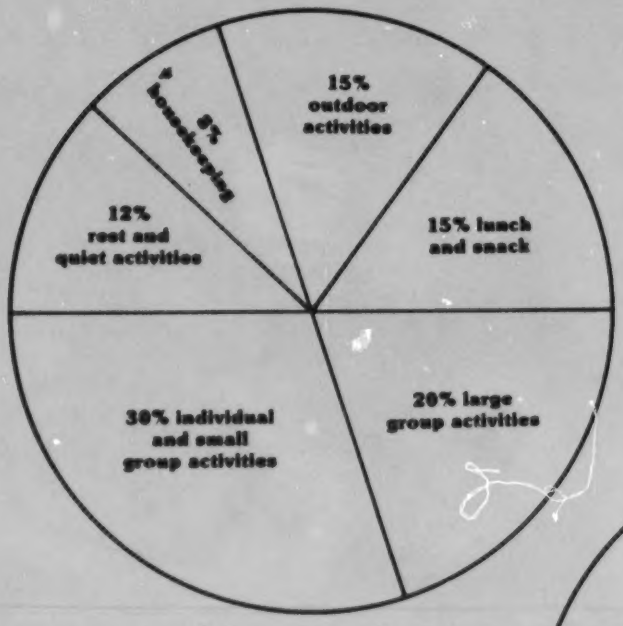
30 minutes	Conversation, planning, movement activity
45 minutes	Toilet and snack Outdoor play
75 minutes	Learning centers
30 minutes	Cleanup Total group discussion of the day Dismissal
60 minutes	Teacher-aide planning, preparation, lunch

Afternoon Session (12:30 - 3:30)
Repeat morning session

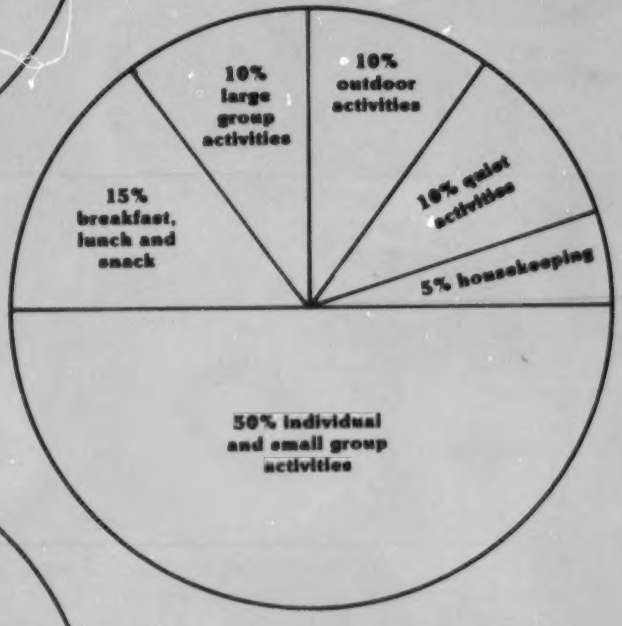
Time Block Model
(based on a seven hour day)

one hour	Children arrive A variety of activities are available Breakfast Conversation Planning for the day's activities with children - total group
two hours	Learning centers Small group work Cleanup
one hour	Outdoor activities including physical and other activities suitable for outdoors
one hour	Lunch Story Quiet time
one hour	Learning centers Cleanup
one hour	Children work in centers Plan with teachers individually or in small groups

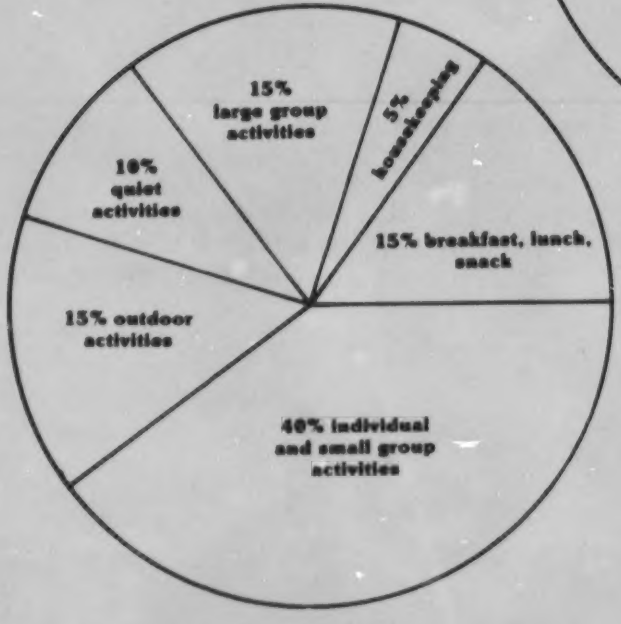
Time Percentage Model
(based on a six- and one-half hour student day)


5% housekeeping
15% outdoor activities
15% lunch and snack
12% rest and quiet activities
30% individual and small group activities
20% large group activities

Time Percentage Model



Time Percentage Model



Suggested activities to be carried out in the various time allottments may include the following and several others.

Individual and Small Group
- working in learning centers
- conferences with teachers
- reading and studying
- use of resource rooms

Total Group
- planning
- films or other audiovisuals
- dramatizations or other presentations
- music, movement activities
- physical education activities
- study trips

Quiet Activities
- individual reading, studying
- music
- story sharing

Outdoor Activities
- outdoor learning centers
- physical education activities
- stories
- music
- reading

Housekeeping
- materials distribution, preparation
- cleanup

Breakfast, Lunch and Snack
- family style meals
- cafeteria

Assisting children with the planning process is a great responsibility for the teacher. Children's planning should involve deciding what they will be doing. This may occur within an informal or formal planning time. Younger children may participate in a whole group planning time in which they discuss with the teacher what happened today and what will happen tomorrow. Older children may discuss and write down the activities and projects in which they will engage and then decide what materials they will need and the amount and kinds of help they will need from adults and other children. This planning usually occurs within small group settings or individual conferences.

Outdoors

The outdoor area of a school should be considered an important aspect of the total learning environment. It should be given careful attention for purposes of planning, equipping and usage.

A well-planned outdoor area provides for physical development and movement and also supports social and intellectual growth.

The play area should be directly accessible from the school building without crossing driveways or streets. The area should be shaped to avoid blind spots. A square, rectangular or L-shaped yard is superior to a T- or U-shaped area. A covered area is a great asset. A drinking fountain and bathrooms should be accessible so that children can readily care for these needs on their own.

The space should have sunshine and shade, and include a variety of surfaces including grassy areas, pavement and sand. Plants, trees, shrubs, grass and other types of groundcover will greatly enhance the space. They should be selected with care to avoid poisonous leaves and fruits. A natural area is excellent for exploring nature and studying plant and animal life, the seasons and weather.

Equipping the Outdoor Environment

In equipping the school yard, safety must be the first consideration. Selection and placement of the equipment must be carefully planned and developed. Simple, sturdy, versatile equipment is by far the best. This type allows children's imaginations to take over and will probably hold interest longer. Commercial equipment is not absolutely necessary. All pieces of outdoor equipment can be built by the local system or a group of parents. (See homemade equipment below).

The outdoor areas for children four to seven and those eight to eleven should probably be separate. Physical characteristics and needs of children in these two age groups are very different. For the younger children, emphasis is on development of gross motor skills and movement. Younger children are less likely to be able to take part in organized games, especially if they require waiting for a turn. For these reasons, equipment in this area should be selected with individual participation or small group, interactive play in mind. For the older children, emphasis should be on coordination activities and the outdoor space and equipment should reflect this.

Some suggested equipment for young children includes swings (preferably tire swings), a slide, a jungle gym or other climbing apparatus, riding toys, sandbox, a tunnel and some foxholes (see homemade equipment).

Equipment for older children may include several of the above items as well as an obstacle course consisting of balance beams of varying heights, horizontal ladders, multilevel chinning bars, parallel bars and a stump walk.

Placement of the various types of equipment is of utmost importance, again for safety, but also for versatility.

Swings should be placed where children will not run or ride near them. They should be placed in an area with good drainage and away from paved or cement surfaces. The surface under the swings might be covered with sand or sawdust to avoid injuries.

The slide should be pointed away from any riding or walking paths and should be shaded in summer. The area at the end of the slide should be covered with sand or sawdust to lessen the impact.

Riding toys should be confined to one area of the yard, preferrably a path or paved area.

Items in the obstacle course should be spaced far enough apart to allow them to be used alone or as a total course. They should also be spaced to avoid a great number of children attempting each obstacle at the same time.

Scheduling the Outdoor Space

Scheduling for greatest efficiency is difficult. Several guidelines make the task more manageable.

1. The scheduling of outdoor space must be a group decision involving teachers and administrators.

2. Time allotted for each group must equal the amount set forth in *Standards for Georgia Public Schools.*

3. Outdoor activity is as much a part of the instructional program as any other activity and should be planned and implemented accordingly. The teacher should be a guide and facilitator for these activities and should not use outdoor time as a planning or relaxation period.

4. It is best to avoid scheduling several classes for the same outdoor space at the same time. There is usually too little equipment for so many children and supervision is made more difficult.

5. If possible, at least two adults should be outside with a group at all times. This allows one adult to be free to take an ill or injured child inside without disrupting the entire class.

6. A rotating schedule in which classes alternate use of a particular play area at differing times of the day relieves one particular group of children of the discomfort of always being outside at the hottest or most uncomfortable part of the day.

Planning

In planning outdoor activities the teaching team should remember that almost anything that can be done inside can also be done outside. In fact, several learning centers and activities are more sensible when set up outside—for example, sand and water play, snacks, planting and certain stories. These can take place at times other than scheduled outdoor time. Nature walks and listening walks are other good activities for outdoors. The activities appropriate for use outdoors are limited only by the teaching teams' imagination.

Supplies

It is important not to overlook the smaller items best suited for outdoor play. These include various size balls, jump ropes, hula hoops and parachutes. These items should be stored in a secured area outside or in some type of portable storage container which can be shared by several classes. A plastic trash can is a good, inexpensive container that the children can carry.

Homemade Equipment

- ***Foxholes***

Concrete pipe at least 24 inches in diameter should be buried vertically in the ground to an above ground height of 18 to 24 inches. Gravel should be placed in the bottom to facilitate drainage.

- ***Tunnel***

Two or three 36-48 inch concrete pipes should be laid horizonally on the ground and secured by concrete or blocks wedged under the edges. These should be close together but not connected. A lazy 'S' shape is exciting for children to crawl or walk through.

- ***Stump Walk***

Sink treated tree rounds vertically in the ground in a row at varying heights. This could form one boundary for the sandbox.

- ***Sandbox***

Use railroad crossties and the stump walk as a boundary for the sand. Order a good grade of sand (not just dirt or top soil) for the pile.

The Teaching Team Outdoors

Members of the teaching team should accompany the class to the outdoor space and should, to the greatest extent possible, take part in the activities which occur there. Interaction among children and with adults is most important in helping children understand, appreciate and enjoy the out of doors.

The first concern of all adults in the school must be the safety of the child. The second great concern is assisting each child in growing and striving to meet his or her full potential. Adults should help children see things outdoors and then talk about them.

Much individual assessment of children is growth can take place outdoors. Opportunities for growth in all three domains abound outside.

Learning Centers

Physical space and its use affects child, teacher, learning, attitudes and behavior. The school has the responsibility to insure that the guidelines as specified in *Kindergarten in Georgia* (1979) and *Standards for Public Schools in Georgia* (1980) are met. Careful attention should be given to teacher/ pupil ratio, lighting, footage, temperature control, room color, storage, furniture, bathroom and water facilities, fire exits and like considerations.

Ideal conditions do not exist in every classroom. There may be a wall with several doors, inadequate heating, little storage space, drab colors and no water in the room. When less than ideal conditions exist, the teaching team (the child, the teacher, assistant teacher, the parent, media specialist, community volunteers, the principal) must be creative in using available resources to improve the physical environment.

Structuring The Learning Environment

Four factors influence the arrangement of an indoor or outdoor learning space.

Children

- Who are the children?
- What age range are they?
- What are their developmental levels?
- What needs, interests and backgrounds do these children have?
- How many children will be using the space at any given time?

Physical Space

- What are the dimensions and shape of the space?
- What stationary objects exist and where are they located?
- Is there easy indoor-outdoor access?

Furniture and Equipment

- Are these in good condition?
- Are these in ample supply for all children, but not to the point of overcrowding?
- Are these the correct size for the children?
- Are these safe and easily moved when necessary?
- Are there necessary kinds of equipment and furniture that are not present? If so, where and how can they be secured?

Curriculum

- What kinds of learning activities will take place in the classroom and what kind of space and equipment will they require?
- What are the resources necessary?
- Will a learning center or some modified approach be used?
- How much and what kind of space will each require?

With these factors in mind, the teacher is ready to begin planning. The arrangement is of utmost importance to the management and behavior of the children.

Grouping

Another implication for the development of personalized instruction is reflected in grouping patterns used in the classroom. Grouping of children must be continually reevaluated. Flexibility is imperative for success. Groups may be formed in different ways and for different purposes. A group may consist of a whole class, a small group (five to seven children), teams working on a project or one child alone. Purposes for grouping are numerous and should determine the size and population of the group. Children may be grouped for a variety of instructional purposes such as the development of a particular thinking process or skill and children's special interests. It may be appropriate at times for children to choose their own groups, developed around their interests and concerns. Other purposes for grouping will arise as planning occurs.

A more general method of grouping children within a school building may be by subject area, often referred to as a departmentalized pattern. An advantage of this grouping pattern is that content area specialists and the media specialist may be valuable contributors to team planning. It is only when teams of teachers plan together to assure personalization of instruction that this grouping method can provide valid advantages for educating young children. Stated another way, if children are taught separate subject areas by several teachers who do not plan together, a departmentalized grouping pattern may actually jeopardize the quality of education for those children.

Cross-age grouping may be considered another effective means of organizing short term activities and projects. Children from several grade levels may be grouped together for the purposes of teaching a unit developed around their interests and special needs.

Learning Centers

A learning center is a place where a small group of children (one to seven) engage in one of several activities. The activities at the learning center are all related to one theme or concept within a range of difficulty levels. Centers may be referred to as "the media center" or "the construction center" but activities within that center will focus on a particular theme. For example, in a unit devoted to People in Space, the media center may be devoted to activities listed under "Researching Space" (see Appendix E) while the exploration center contains activities listed under "Real Space." Learning centers can provide children with a range of activities and an opportunity to select an activity from among several activities. This method of classroom organization is especially suitable for implementation of personalized and integrated activities.

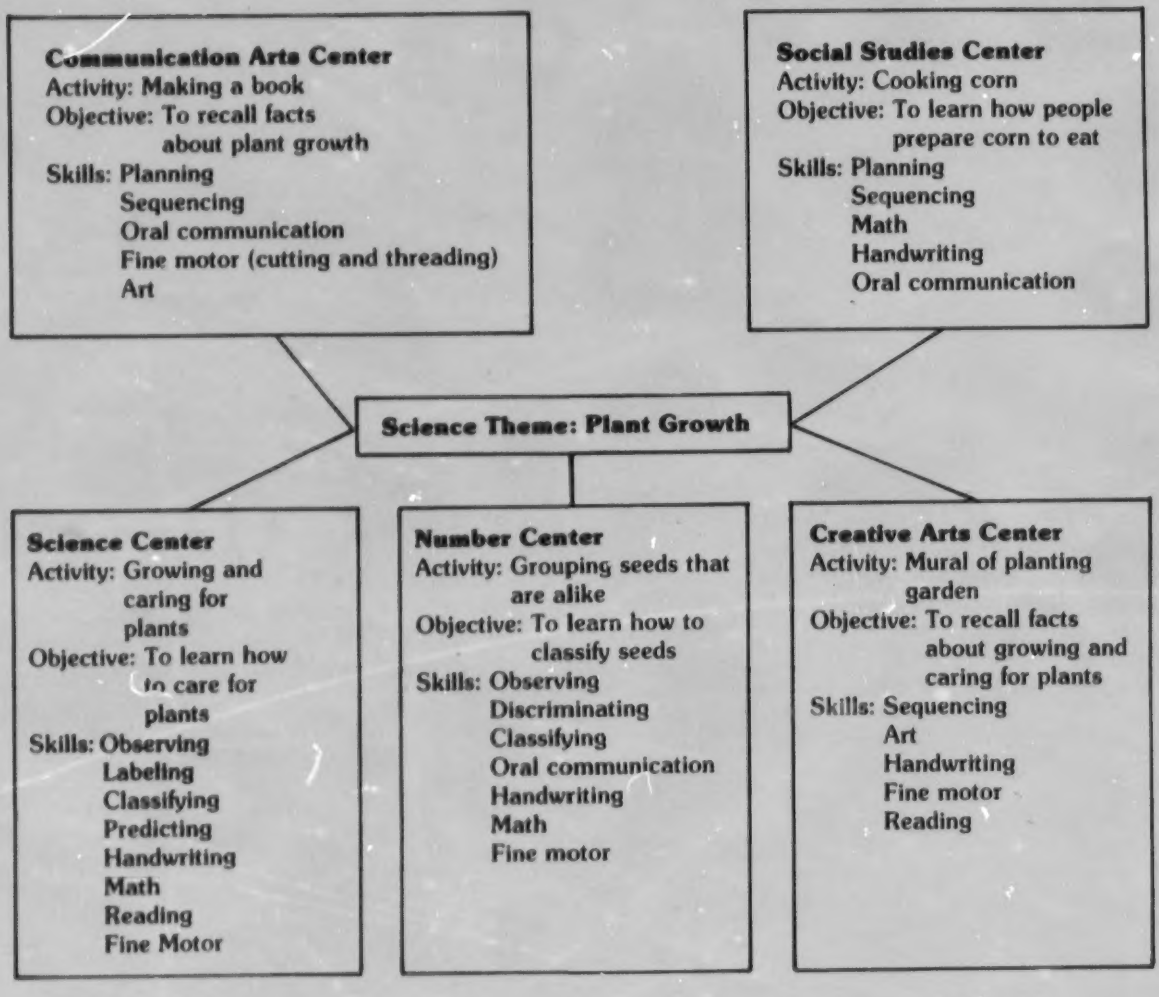
Learning centers are developed gradually. As the year progresses, materials are added, increasing variety and challenge. Students need time to explore and get acquainted with their environment. The schedule should allow at least one hour for learning center activities in order to provide the opportunity for a child to work in several centers or to carry out an extended project in one center. Within this framework, the teacher has opportunities to work with individual children or groups of children.

Learning centers integrate all areas of development. Table Eight shows how development in the physical, intellectual and affective domains may be integrated into centers.

Table Eight
Integration of Child Development into Learning Centers

Learning Center Theme And Activity	**Physical Development**	**Intellectual Development**	**Affective Development**
Construction Center Theme: Space Travel. Child Selected Activity: Build space tower.	The child develops arm and hand precision by constructing tower	The child integrates previous observations with new experience	The child willingly participates with other children in building tower
Library Theme: Space travel. Child Selected Activity: Listen to story about an astronaut's travel in space.	The child develops hand and finger dexterity by operating listening post and turning pages of picture book	The child verbally recalls events of story in order	The child listens to another child's response to story
Cooking Center Theme: Space food. Child Selected Activity: Mix orange drink.	The child develops hand and finger dexterity by mixing orange drink	In small group discussion the child recalls food eaten by astronaut	The child willingly participates with other children in preparing a menu

Table Nine
Activities Available in Learning Centers



Ways to Use Learning Centers

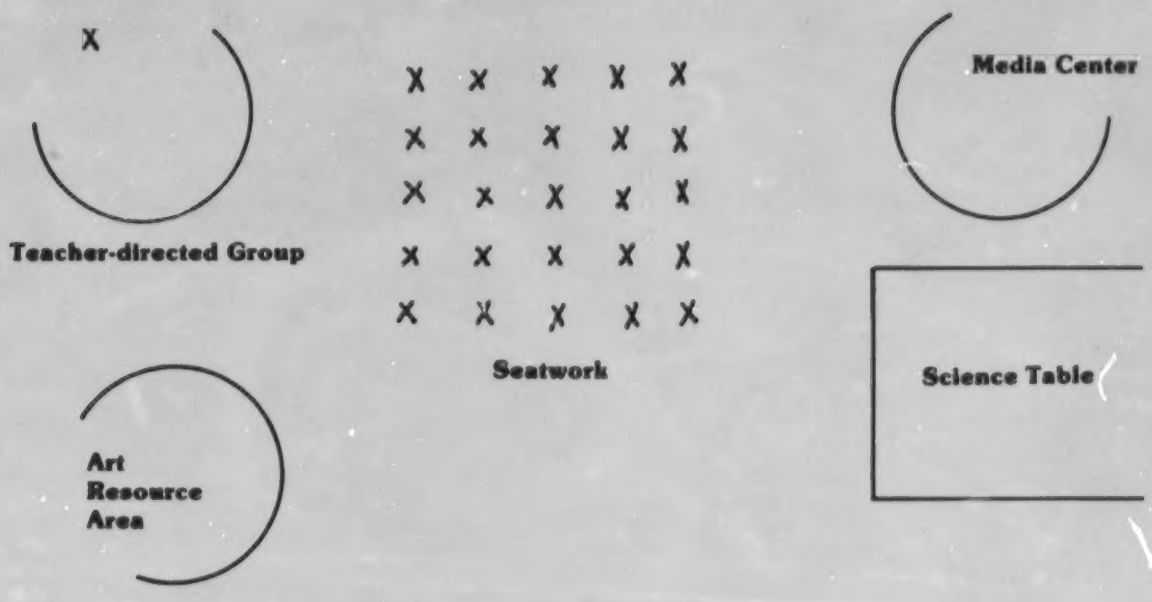
Learning center organization will vary both in terms of the teacher's experience and the needs and experience of the students.

Based on the assumptions that (1) there are many ways of organizing learning centers and (2) most upper primary grade teachers use a basal approach to teaching, the following alternatives are presented.

- Teacher directed group + seatwork + interest areas
- Teacher directed group + seatwork + learning centers
- Teacher directed group + learning centers
- Total learning center organization

I Basal Reading Group + Seatwork + Interest Areas

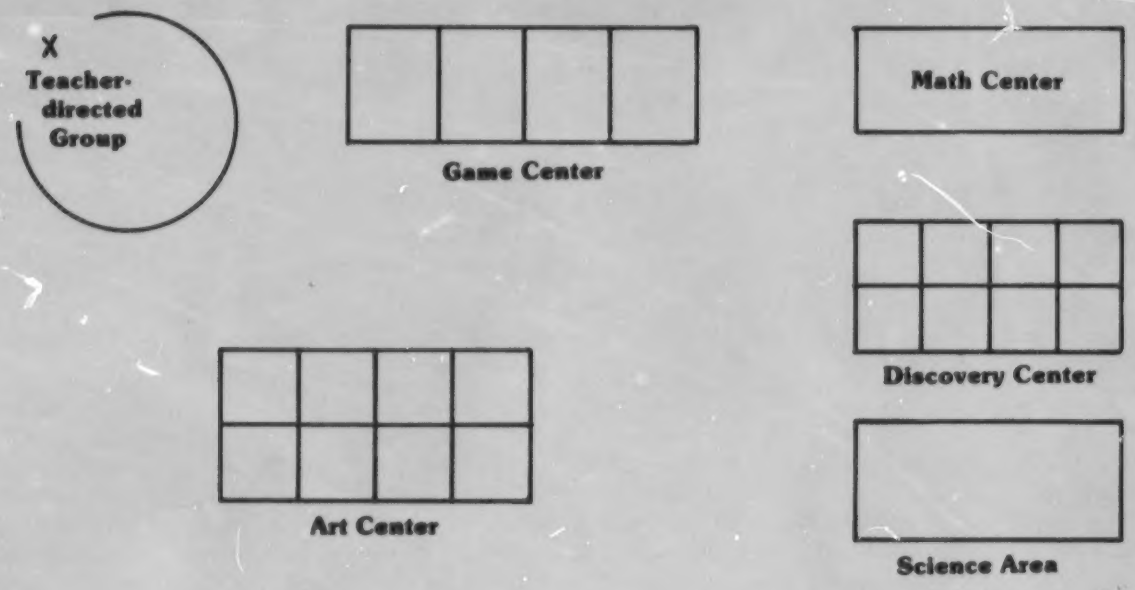
In this method of organization, children are divided into two groups. One group works with the teacher in directed learning activities. The other children work at their desks but are free to go to interest areas to bring resources for their seat work to their desks (e.g., books from the media center, rock specimens from science table, scissors and paper from the art resource area).



II Teacher-Directed Group-Seatwork + Learning Centers

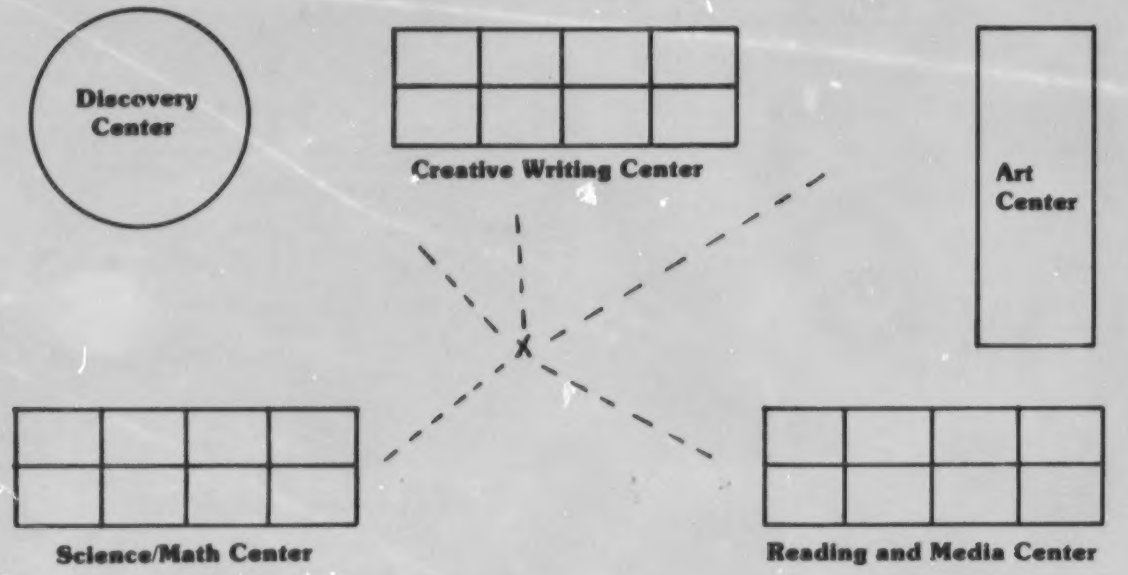
In this organization the teacher uses a basal reading or readiness approach which groups children into three homogeneous groups. While one group of students works with the classroom teacher in directed learning activities, another group completes written assignments at their desks. Students in the third group select to work at either of the two learning centers. When the teacher finishes lessons with a group, the children in the room rotate to a new activity (e.g., the reading group moves to seatwork group moves to the learning centers).

III Teacher-directed Group + Learning Centers



In this organization the teacher again works with one group of children. The others are organized into center groups. Over a period of time all of the children rotate through the centers, including the direct instruction lesson with the teacher.

IV Total Learning Center Organization



In this organization children may either rotate through all of the centers, be assigned to one or more centers with one or two free choices or be assigned to work at specific centers.

Planning for Learning Center Activity

There is no one sequence of steps which must be followed in planning learning centers. Any one of the following components of a learning center may be identified first, but as each center is completely planned all of the following components will be accounted for.

- Learning center theme
- Process categories
- Instructional objectives
- A range of activity options
- Assessment procedures

The learning center theme focuses the activity at the center. Suggested themes may include

- an event such as Halloween, birthday, trip to outer space
- an activity such as art, cooking, a game, woodworking
- skill and concept development such as sorting, matching, discrimination, space, community, transportation, etc.

Identification of the process categories focuses the range of content area objectives and assists the teacher in specifically integrating thinking ability skills into the activities provided. Instructional objectives need to focus on the range of development across the three domains. Enough activity options should be located at each center so that every child can be successful at completing at least one activity. Learning centers provide a range of activities for all students in the room. Finally, assessment procedures that efficiently account for the growth of students as they interact need to be identified at each center. Once developed, learning centers provide rich and varied resources for learning and may be used for a variety of purposes as described in the following table.

Table 10
Basic Uses of Learning Centers

Learning Center Uses	Activity Example
Introduce new concepts and skills	Group familiar objects which are alike
Practice concepts and skills	Using a new set of objects, again group objects which are alike
Assist child in taking responsibility for his or her own learning	Child selects and returns materials to their proper storage area.
Provide a variety of activity choices to enhance individualized instruction	At the exploration center, child may • look at rocks under a microscope • group smooth and rough rocks • order rocks by size • develop a design using rocks.
Promote the integration of physical, affective and intellectual development	At the Media center, child will • select picture book about animals (intellectual) • share book with another child (affective) • turn pages of book as modeled by adult (physical).
Promote independent learning and exploration	Provide a range of materials at center. Arrange materials in an attractive manner. Introduce center with an open-ended question—"Who will discover what is in our 'touch box' this morning?"

Management of Learning Centers

Whole group planning sessions acquaint children with the learning centers and allow them to brainstorm activities for a learning center. Following a general discussion about the centers, each child selects a learning center to use. For example

- ***Choice Boards***

List or picture each learning center. Children select a center at which to work by taking a key or other symbol located beside that center name or picture. The number of symbols beside each center are limited to the number of children who may participate at that center at any given time. When a child is ready to move on to another center, he or she returns the symbol to the board and selects another symbol.

- ***Pocket Charts***

Located at each center, pocket charts allow each child to place his or her name card or picture card in a pocket on the chart. The number of pocket openings will indicate how many children may work at the center at any one time.

Whatever means is used, the procedure must provide the child with maximum independence. The child should be able to select and move on to another center independently. New centers and new center activities are introduced gradually over a period of time. The teacher may effectively introduce new activity options by modeling activity options at the center. After children have observed actual operation in a center, they will be more independent and successful in working at that center.

In order to effectively operate the centers, quiet activity should be separated from the noisier areas. For example, block building and dramatic play centers should be distant from the media or game centers.

By creating open-ended options for each center activity, children may develop a center activity in a number of imaginative ways. For example, at the multisensory center the children may sort a number of bottles that are alike in some way. The open-ended nature of the activity allows each child to sort the bottles according to size, color, color, shape or use. Many different responses are possible. Teachers may encourage open-ended responses from children by asking questions as the following.

"I wonder what would happen if . . .?"

"How do you think these go together?"

"What can you use to help you find the answer?"

A variety of manipulative materials at each center will provide open-ended activities. Children should be encouraged and helped to develop their own ideas and unique ways of responding to materials and activity. Materials at each center should

- relate to the center theme;
- extend individual child growth;
- allow for teacher and child assessment of activity.

It is important to set ground rules for children's behavior. The fewer ground rules needed, the better, but some limits will need to be developed and discussed. Following are some suggested rules. The child should

- work at the center selected;
- take responsibility for returning materials to the proper place;
- leave materials at the center ready for use by next participants;
- seek assistance from another child or adult if help is needed;
- finish work at one center before selecting another center;
- modify tone of voice when working at an indoor center.

Each adult working in the classroom will actively observe and interact with children during learning center activity. Adults should engage in one or more of the following activities at this time.

- Supervise and facilitate child activity at one center;
- Work with individual children at any of the centers to support child activity;
- Observe particular children to acquire specific information about child growth;
- Spend time at several centers to introduce new materials, new operations or new concepts.

Selection of materials used at the centers should be based on

- center theme;
- children's level of operation;
- provisions for a range of sophistication in activity options;
- ability of children to use material constructively.

Materials at the centers will be primarily manipulative, thus allowing children to actively interact with the learning environment.

Evaluating Child Growth At Learning Centers

Child growth may be evaluated in any one or all three of the program domains (physical, intellectual, affective). This evaluation may be based on

- interaction with the child;
- observation of the child;
- work the child has completed at the center.

As often as possible, the child should be given verbal response in order to learn self-assessment of work and to better select and complete future work at a learning center.

Suggested Learning Centers

The following learning center suggestions are listed for your consideration. This listing is not intended to be inclusive, but to suggest a limited number of examples for teachers. At each of these learning centers, opportunities abound for gross and fine motor development, communication, social interaction, experimentation with ideas and objects, discovering new concepts and ideas, practicing skills and applying and generalizing ideas about self, other people and the world.

- ***Construction Center***

  Children are encouraged to manipulate and create with blocks and block building accessories. Boards may be added to this center to add possibilities for new construction. A woodworking bench may be placed within this center or next to it to further enhance construction possibilities for children.

- ***Media Center***

  A prominent place in the classroom where children look at books or listen to stories, this center offers a wide variety of picture books and story books. Large cushions on the floor and a rocking chair provide comfortable seating. The books should be easily accessible and appealing to the child.

- ***Cooking Center***

  This center may be available to children periodically throughout the year. Tools include a hot plate, measuring materials, cooking utensils and a place to store cooking materials. In addition, cutting boards and dishes may be added to the center throughout the year. Children may serve their cooking fare at the center or in other areas of the room.

- ***Game Center***

  This center will house a wide variety of game activities including puzzles, lotto, bingo, pegboards, sewing cards, etc. These games will be stored so that only a limited number will be available to the children at one time. Game selection will be based on child need and interest.

- ***Multisensory Center***

  This center provides educational activities designed especially to promote intellectual development. Materials in this center promote the child's ability to use all five senses—sound, smell, taste, sight, touch—in discriminating, generalizing, categorizing, analyzing, evaluating and thinking creatively. In one area a variety of manipulative materials may promote development in mathematical concepts of number sets, number systems, size, shape and measurement, while in another area, reading oriented materials promote listening, visual and auditory discrimination and eye-hand coordination.

- ***Exploration Center***

  In this area, related to the concepts in social studies and science, children observe, classify, predict and report information based on a variety of experiences.

- ***Communication Center***

  This center will include a variety of printed materials along with listening devices. Students will have multiple opportunities to read, listen, speak and write about their experiences.

- ***Art Center***

  Paint, crayons, chalk, paper and clay will invite children to create and express their feelings and impressions of the world around them. Close access to water will enhance operation of this center.

- ***Dramatics Center***

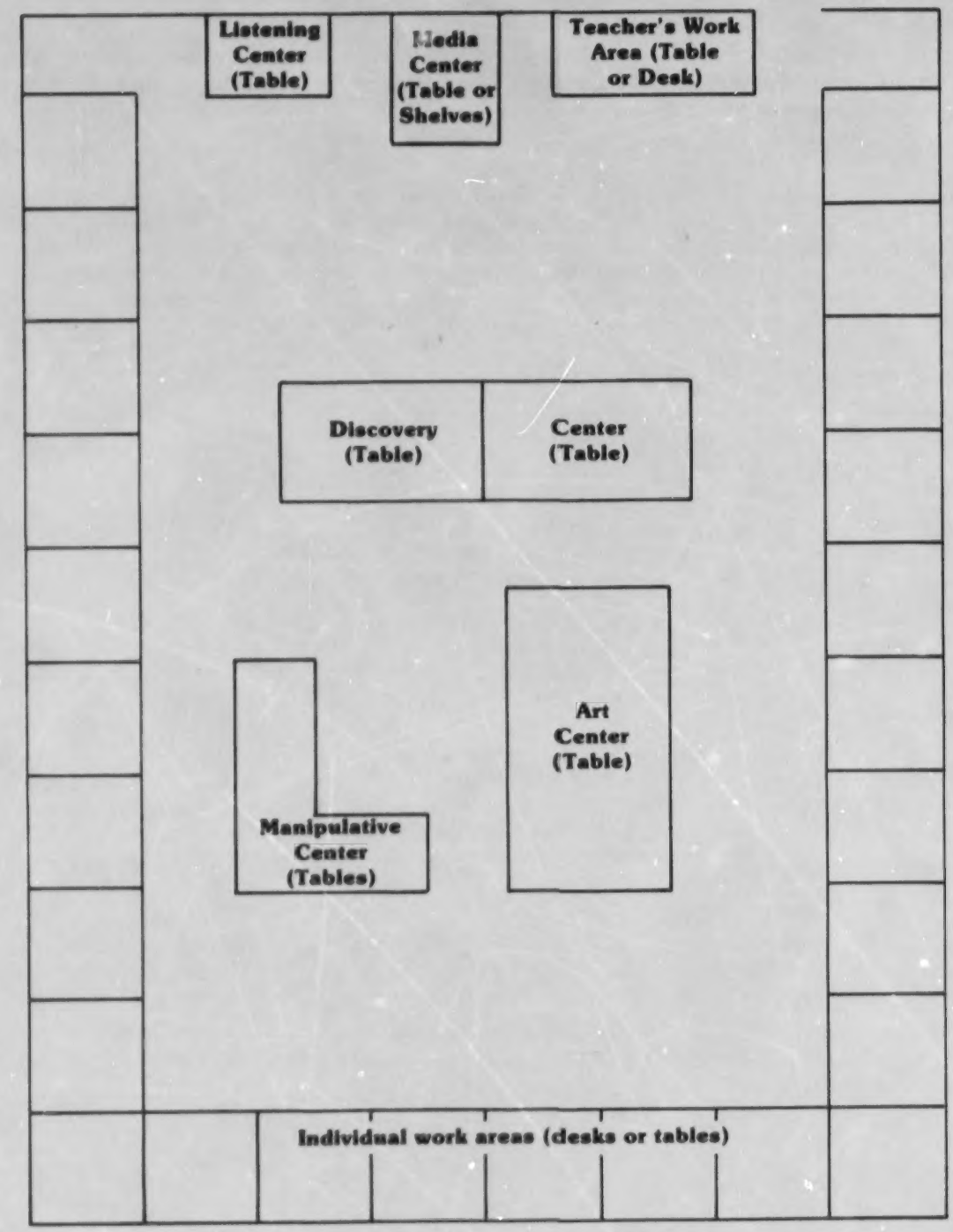
  Role play and imaginative play help children to clarify and expand their concepts and experiences. Reenacting social experience is a popular activity for young children. This area will change frequently during the year to provide settings such as a house, a supermarket, a shop or a mode of transportation. Suggested props include clothing, household utensils and furniture, puppets and cleaning tools. This center should be located near the construction area to encourage children's response and interests.

- ***Motor Development Center***

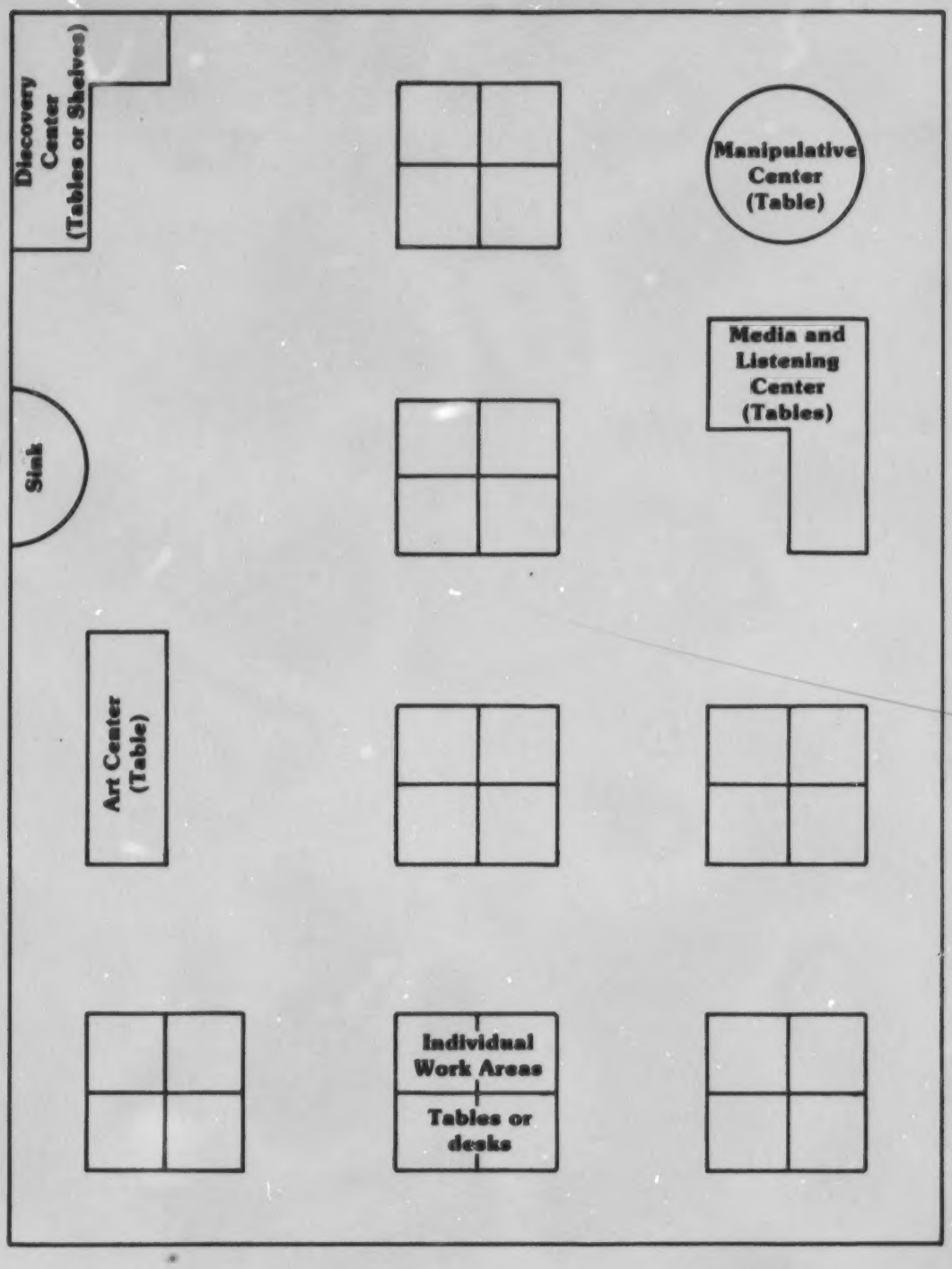
  It is highly desirable for the classroom to have direct access to indoor and outdoor areas for large movement activities. Space is necessary for activities such as climbing, running, jumping and balancing. Sand and water play activities may be located outdoors or indoors to promote motor development.

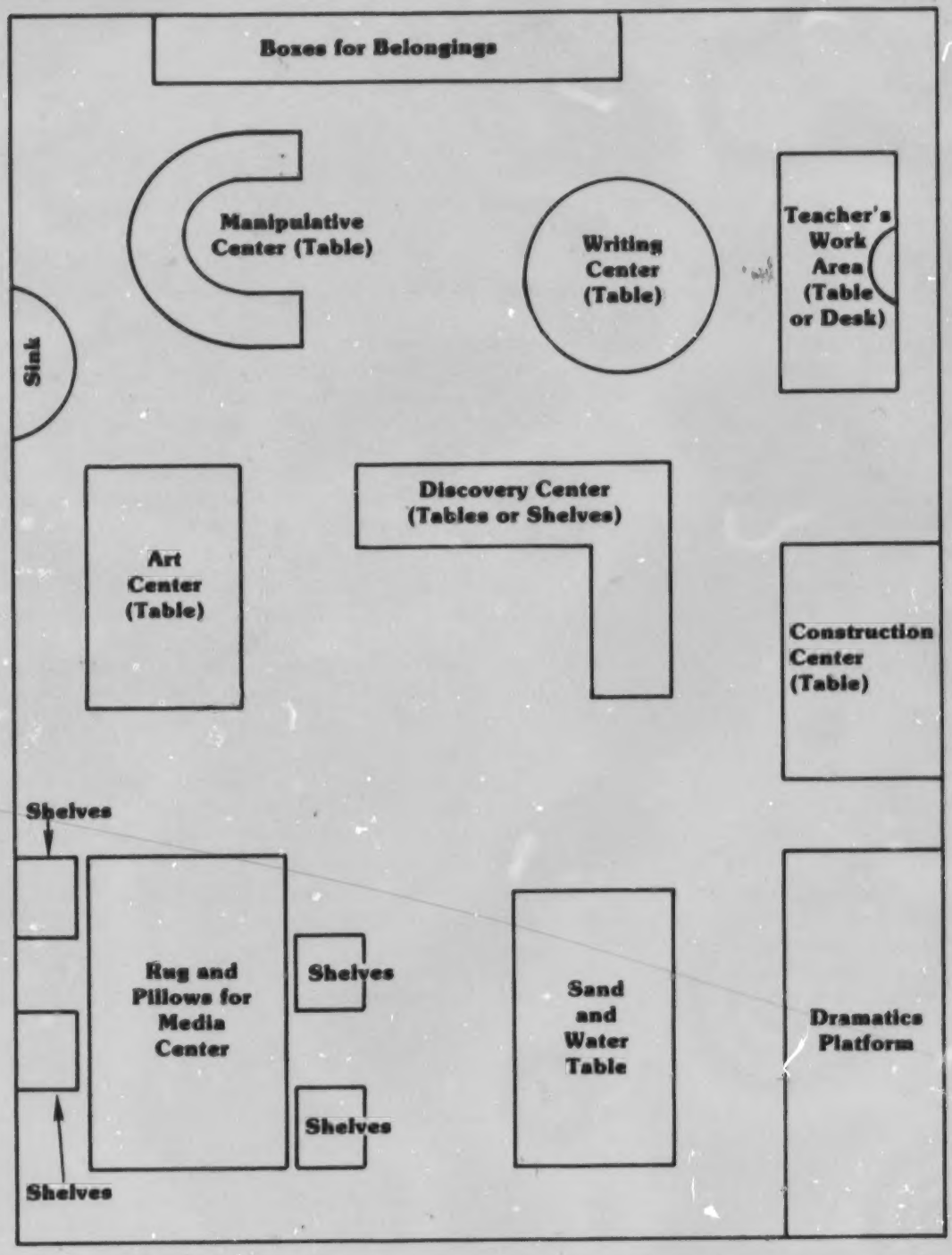
The above examples of learning centers should remain in the classroom for weeks or months. The teacher might also want to use the children's interests and needs in establishing short-term interest centers, such as water table, sand table and "Star Trek" center.

The following diagrams suggest several ways that the classroom may be arranged to accommodate learning centers.


Listening Center (Table)
Media Center (Table or Shelves)
Teacher's Work Area (Table or Desk)
Discovery (Table)
Center (Table)
Art Center (Table)
Manipulative Center (Tables)
Individual work areas (desks or tables)

Construction Center
(Tables)
Art
Center
(Table)
Media Center
(Table)
Individual Work Areas (Desks or Tables)
Individual Work Areas
(Desks or Tables)
Individual or
Small Group Work
Area (Desks or
Tables)
Discovery
Center
(Table)
Manipulative
Center
(Table)


Discovery Center (Tables or Shelves)
Manipulative Center (Table)
Media and Listening Center (Tables)
Sink
Art Center (Table)
Individual Work Areas
Tables or desks


Boxes for Belongings
Manipulative Center (Table)
Writing Center (Table)
Teacher's Work Area (Table or Desk)
Sink
Art Center (Table)
Discovery Center (Tables or Shelves)
Construction Center (Table)
Shelves
Rug and Pillows for Media Center
Shelves
Shelves
Shelves
Sand and Water Table
Dramatics Platform

Instructional Resources

Using Instructional Resources to Support Your Curriculum

Educational media programs in Georgia public schools focus on providing instructional resources in a variety of formats to support the curriculum as well as on the use of those resources in addressing teaching strategies and learning activities to meet student needs in the most effective way. A combination of resources, including print and nonprint materials, equipment essential for their use or production, and programs, services and additional resources available through state, community and other educational agencies, are necessary for effective support of instructional programs.

Insuring access and preventing unnecessary duplication of resources is important. This will be accomplished when information about resources that support early childhood learning activities, including simulation games, models, sculpture, manipulatives and framed prints, as well as books and audiovisuals, are available through the school's media program. In some systems an additional resource service designed to augment the building media program is provided. From the variety of resources available, teachers with media professionals can produce diverse activities for individuals or small groups. By selecting the most appropriate format for a particular child's or group's needs, audio and video recordings, films, manipulatives and the community can be creatively interwoven into established instructional techniques. Use of a variety of resources and instructional techniques does not demand a departure from existing use of textbooks and established instructional strategies, only an integration of interdisciplinary approaches.

A community resources file, developed cooperatively by media and instructional staff, provides valuable information about local people, places, activities and unique resources to enhance the instructional program designed for the primary school child. Such a file would be updated frequently. Volunteers for program support as well as sources of information should be considered for inclusion. Many people may volunteer to tell or read a story, stimulate creativity, share a skill or provide assistance in completing routine tasks.

Teacher and media specialist planning together can provide frequently changing exhibits of students' works and collections and items and bulletin boards. Exhibits from the community ranging from works of local artists to local industrial and agricultural products will enrich children's experiences. Local musicians, dancers, craftsmen, businessmen, industrialists and goverment representatives are resources which expand learning.

By planning together, media and instructional personnel can design the most flexible use of media space and arrangement of furniture for a variety of activities. Cooperative planning can also result in varied and flexible processes for scheduling activities in the center. Not only will the class have access to the center; so will small groups and individual children. Combinations of such group activities as media skills development, reference work, story sharing, viewing and listening activities can occur while individuals pursue these activities, both self-directed and in learning centers.

Introduction to beginning media skills should begin early in the school year of the kindergarten child. Introduction and development of additional skills each succeeding year assures development of independent, life-long learners. Classroom and media personnel planning cooperatively will insure that children develop their abilities to design, develop and produce materials as well as locate previously prepared resources and use them appropriately.

Media specialist, although not directly responsible for content instruction, have teacher certification. By involving them in curriculum and instruction planning, development and revision, they have a more accurate understanding of the needs of teachers and students and can suggest alternatives based on their knowledge of resources. The match of resources needs will be more appropriate.

Listed at the end of this chapter are resources for locating and reviewing the wide variety of instructional materials available to educators.

The Education Team

Children tend to learn and model their behavior after significant adults in their lives. It is imperative, therefore, that adults function at school as a team and serve as models of personal communication, understanding and cooperation in order to function effectively in the education of children.

This education team may include the principal, teacher, aide, counselor, media specialist, nurse, specialist and volunteer. Because the personal relationship between the individuals will directly affect their relationships with the children, they need to devote time to working out positive personal relationships.

Specifically, effective teamwork requires

- mutual respect and support
- clear communication channels
- planning time
- procedures for resolving differences
- clear definition and understanding of roles and responsibilities.

Every member of the education team will bring to the job personality, abilities and background that distinguish him or her from other team members.

The Role and Responsibilities of Team Members

The Principal

The principal is an important member of the educational team. He or she assumes responsibility for management of the school, determines school policy, sets the general tone of the school and has a major influence on both the learning climate and staff morale. Specifically, the principal is charged with the following.

- Coordinating the educational team
- Initiating the measures to integrate the curriculum at all levels of early childhood education (ECE)
- Recognizing the value of setting standards in ECE
- Interpreting ECE philosophy and objectives to the community
- Supporting the teaching team in developing an appropriate program for ECE
- Developing cooperative relations between home and school
- Working with the educational team to develop schedules which include adequate instructional planning time and time for home visits and parent conferences
- Enlisting the aid of parent and community volunteers on the educational team
- Providing for adequate pupil-teacher ratio, equipment, supplies and resources
- Providing for ongoing assessment and evaluation of children, team members and the total school program
- Providing for regular, scheduled feedback to team members and parents.
- Providing professional growth opportunities

The Teacher

The teacher needs to capitalize on each team member's talents and strengths and use his or her basic knowledge of children's growth patterns and learning styles. The teacher leads the teaching team in the following.

- Setting the classroom policy
- Organizing the curriculum
- Planning, creating and managing the learning environment
- Diagnosing, evaluating and recording student needs and interests
- Identifying objectives and planning activities related to objectives
- Planning and selecting instructional materials and methods with the media specialist
- Assessing and evaluating the student's progress on a regular basis
- Using parent and community volunteers
- Establishing effective communications with parents and community
- Scheduling home visit with parent conferences
- Making referrals and using specialists
- Respecting the rights of students by maintaining confidential information and refraining from discussing students with nonschool persons

The Aide

The well-trained aide is an invaluable member of the teaching team. In addition to relieving the teacher of many routine clerical and housekeeping duties, the aide may also perform many instructional support tasks under the direct supervision of the teacher. The following responsibilities may be assumed by the aide alone or by the aide and the teacher together.

- Assist in and support the activities of the teacher in guiding the learning of the students in all areas
- Reinforce in individual or small group situations a specific skill or concept introduced by the teacher
- Record stories, poems and experiences that students dictate
- Work with individuals or small groups on research or special projects
- Provide emotional support and close supervision for the student having behavior problems in the classroom
- Type or prepare reports, tests and instructional materials selected by the teacher
- Set up and maintain files of correspondence, reports, tests, students' work and instructional materials and aids
- Assist with routine classroom tasks such as cleaning chalkboards, caring for live specimens, mixing paint and cleaning up after activities, collecting fees and keeping daily attendance records
- Help supervise the cafeteria, the bathroom, the media center, the playground and the loading and unloading of buses

The Media Specialist

Media specialists serve as resource persons to teachers, students, administrators, parents and the community. In this capacity media personnel can do the following.

- Coordinate or manage composite files for units
- Facilitate the selection of instructional resources in a variety of formats to support the program
- Manage those resources to assure easiest access and retrieval
- Serve on curriculum and other school related committees

- Assist in designing and developing resources to meet specific learning objectives
- Structure staff development activities related to use of instructional resources designed to meet teacher needs
- Coordinate identification of and access to community resources (people, places, services, activities, products) to support and enrich learning experiences
- Design, with teachers, activities to introduce, develop and sustain student media skills needed for the effective use of informational sources
- Evaluate and modify media service with educators and community representatives

The Guidance Counselor

The guidance counselor will assist children on an individual, small group or classroom basis.

- To gain self-confidence and self-esteem
- To understand themselves and others
- To learn decision-making skills
- To develop problem-solving abilities
- To resolve problems
- To talk about social and academic concerns
- To make the best use of personal capabilities
- To feel useful

The counselor is also responsible for consulting and collaborating with parents, teachers and significant others (social workers, visiting teachers, psychologists, media specialists) in the following areas.

- Classroom performance and behavior
- Child growth and development
- Curricula development
- Staff development and study groups
- Identification of exceptional children
- Interpretation of test results, psychological reports and other relevant data
- Communication between student, home and school
- Parent volunteer programs
- Child safety groups
- Career education
- Pupil personnel helpers from the district level

The School Nurse

The school nurse contributes the following to the educational team.

- Coordinating health services
- Screening for vision, hearing and other health problems
- Making specific recommendations and suggestions for classroom adjustment
- Serving as a liaison between the system's curriculum and psychological services

- Facilitating communication between the school staff and the parents of students in the special program
- Interpreting the special program to the school and community through workshops and programs

The Volunteer

As a member of the educational team, the volunteer may assume many of the responsibilities generally performed by an aide. Volunteers are generally recruited from the community and may include parents, grandparents, representatives of local businesses and agencies or persons with special abilities such as musicians and artists. Some of the responsibilities are

- Interpreting in a bilingual community.
- Assisting in the supervision of the nutrition program.
- Assisting with playground and bus duty.
- Aiding the school nurse.
- Aiding the school media specialist.
- Assisting on field trips.
- Making teaching materials.
- Assisting the teacher in planing a unit which is focused on a speciality of the volunteer.
- Publishing a school-community newsletter.
- Sharing a wealth of information, experience and skills which can enrich the instructional program.
- Relating and interpreting the school program to the community.
- Communicating community needs to the school.

Guidelines to Effective Personal Interactions

Interactions and relationships play an important role in the teaching-learning process. Their impact on the development of the child, however, is often overlooked or ignored. The following questions have been adapted from *Guidelines for Observation and Assessment* (Mattick and Perkins, 1973), to serve as guidelines for considering daily interactions. Take a few minutes each day to assess these interactions. Be honest! It may be surprising how helpful this assessment can be in establishing an open and supportive environment for children's growth.

Teacher and Child Interactions. Are the interactions

- Based on mutual trust and respect?
- Expressive of genuine warmth and concern for students?
- Based on an understanding of developmental needs?
- Mutually respectful and confident or resentful, coercive and fearful?
- Reflective of an adult-child ratio which allows for quality interactions?
- Consistent, or do they vary with mood, time of day, child?
- Frequently successful in bringing desired results?
- Reflective of the teacher's respect for students' ideas, feelings and abilities?
- Reflective of the teacher's awareness and acceptance of individual differences?
- Supportive of the child communicating to the teacher as well as the teacher communicating to the child?

- Communicating honest feelings without losing control?
- Consistently communicating that what is said is in fact what is done?
- Supportive of and comforting to children who become ill or hurt?
- More intimate and supportive during early morning and late afternoon?
- Positively supportive of cultural and ethnic differences?

Staff Interactions - Do Interactions

- Model trust, respect and support of adults and students?
- Occur regularly as purposeful and supportive of staff assignments?
- Reflect the consistency of planning and working together that provides for optimum student involvement and learning?
- Reflect a cooperative spirit?
- Support the use of special talents of staff members in the program?
- Support differentiated staffing patterns, considering professional competency and specific areas of personal effectiveness?
- Reflect the amiable resolution of staff differences?
- Support staff members in crisis situations?
- Allow staff members to share ideas?
- Encourage staff members to try out new ideas?
- Encourage staff members to take personal responsibility for the smooth functioning of the school?

Peer Interactions - Do Interactions

- Provide for useful communication among the students?
- Encourage the students to tell each other about their experiences or demonstrate to each other a newly learned skill?
- Support give-and-take encounters between students?
- Encourage students to frequently and spontaneously offer help and cooperation to one another?
- Support students in communicating feelings to each other with warmth and friendliness rather than with aggressiveness?
- Foster friendships?
- Support students' using acceptable methods to settle conflicts?
- Support opportunities for students to interact with students of different ages?
- Provide opportunities for students from a variety of backgrounds, lifestyles and learning levels to communicate and interact?
- Encourage students to explore and appreciate both differences and similarities?
- Support healthy social and racial interactions?

Parent-Teacher Interactions - Do Interactions

- Reflect mutuality of trust and respect?
- Encourage parents to become actively involved in various aspects of the school program?

- Support procedures which ensure that parents have a voice in decision making in the school?
- Keep parents informed about the school program by regular written or oral communications?
- Maintain regularly scheduled parent-teacher conferences?
- Support and maintain regular sharing between the parent and teacher about the student's progress, accomplishments and difficulties at home and school?
- Provide for teacher demonstration of sound educational methods with the student in the presence of parents (e.g. listening attentively to the student rather than interrupting him to talk to the parent)?
- Encourage teachers and parents to verbally share successful procedures for working with individual children and children in a group?

Program Evaluation Checklist
Learning Environment

	Yes	No	Comments
Planning			
1. Long range planning is used to organize			
A. Instruction based on selection of objectives for individual child growth.	☐	☐	
B. Materials and equipment in advance.	☐	☐	
C. Parental involvement.	☐	☐	
D. Community resources.			
2. Long range planning is based on objectives along a continuum of child growth and development in the areas of			
A. Psychomotor development.	☐	☐	
B. Cognitive development.	☐	☐	
C. Affective development.	☐	☐	
3. The continuum of objectives			
A. Provides continuity (K-4).	☐	☐	
B. Is consistent with system goals.	☐	☐	
C. Incorporates state objectives.	☐	☐	
D. Reflects local community needs.	☐	☐	
E. States objectives in a sequence from simple to complex within each curriculum area.	☐	☐	
F. Is used for planning children's daily activity.	☐	☐	
4. Daily planning sessions			
A. Occur at a regular time each day.	☐	☐	
B. Involve teachers, aides and media specialist.	☐	☐	
C. Involve a segment of evaluation.	☐	☐	
5. The planning process includes			
A. Recording child growth in active learning situation.	☐	☐	
B. Consideration of children's past experience in and out of school.	☐	☐	

		Yes	No	Comments
C.	Considerations of children's ideas about what should be learned or experienced.	☐	☐	
D.	Identification of how each member of the instructional team will function in the classroom.	☐	☐	
E.	Consideration of various instructional patterns for different purposes.	☐	☐	
F.	Providing opportunities for children to work with children of like abilities and maturity, and with those of widely differing ages, abilities and interests.	☐	☐	
Implementation				
6.	***The physical space of the classroom***			
A.	Is arranged into well defined learning situations.	☐	☐	
B.	Motivates children to participate in a wide range of activity.	☐	☐	
C.	Encourages and supports an active learning environment.	☐	☐	
D.	Reflects the cultural background of the children (bulletin boards, books, equipment).	☐	☐	
7.	***Adults in the classroom***			
A.	Interact positively with individual children.	☐	☐	
B.	Observe individual children.	☐	☐	
C.	Give suggestions and support to a child who needs help.	☐	☐	
D.	Provide feedback to children about their work.	☐	☐	
E.	Record progress and growth of children.	☐	☐	
F.	Accept and use children's out-of-town school interests (television, toys, stories) as themes for developing learning activities.	☐	☐	
G.	Give guidance, direction and support when necessary, without dominating the work process.	☐	☐	
H.	Make suggestions and set limits to assist children in dividing tasks.	☐	☐	
I.	Maintain an awareness of each group's work.	☐	☐	

		Yes	No	Comments
J.	Assist with progress and decision making.	☐	☐	
8.	***Teachers involve children in the planning and assessment process by encouraging children to***			
A.	Talk about what they have done in the classroom during whole group discussion, small group discussion, individual conference.	☐	☐	
B.	Suggest activity themes and materials for use in classroom.	☐	☐	
C.	Help develop classroom rules.	☐	☐	
D.	Be involved in the group establishment process.	☐	☐	
9.	***Teachers support children's thinking by***			
A.	Listening to children's ideas.	☐	☐	
B.	Verbally acknowledging children's activity.	☐	☐	
C.	Accepting the language and ideas of children.	☐	☐	
D.	Extending ideas of children.	☐	☐	
E.	Asking open-ended questions.	☐	☐	
F.	Allowing children to move in and out of groups as interests and needs indicate.	☐	☐	
G.	Giving guidance, direction and support when necessary, without dominating the work process.	☐	☐	
H.	Making suggestions and setting limits to assist children in dividing tasks.	☐	☐	
I.	Maintaining an awareness of each groups' work.	☐	☐	
J.	Assisting with progress and decision making.	☐	☐	
Evaluation				
10.	***A systematic method is used to record individual child growth.***	☐	☐	
11.	***Daily evaluation sessions are held with***			
A.	Individual children.	☐	☐	
B.	Small groups of children.	☐	☐	
C.	The entire class.	☐	☐	

		Yes	No	Comments
12.	***During evaluation sessions, teacher communication focuses on the strengths of the child.***	☐	☐	
13.	***During evaluation sessions, the child is made aware of needed improvements.***	☐	☐	
14.	***A child's success is based on a personal level of progress as related to the continuum of objectives.***	☐	☐	
15.	***Parent conferences are conducted and reflect the child's strengths, accomplishments and progress related to goals.***	☐	☐	
Scheduling				
16.	***The written schedule includes***			
	A. Planning time for children.	☐	☐	
	B. Planning time for instructional personnel.	☐	☐	
	C. Time to observe and assess child growth.	☐	☐	
	D. Time blocks of one hour or more for learning situations in which children are responsible for self-initiated and self-regulated activity.	☐	☐	
	E. Reference to the continuum of objectives.	☐	☐	
	F. There is a balance between			
	• independent exploratory/discovery activities.	☐	☐	
	• group size—one child, small, total	☐	☐	
	• vigorous play and less active play.	☐	☐	
	• member-leader participation	☐	☐	
	• indoor and outdoor activity.	☐	☐	
	• affective//cognitive/psychomotor.	☐	☐	
17.	***The daily plan identifies***			
	A. Time blocks.	☐	☐	
	B. Learning themes and activities.	☐	☐	
	C. Materials or equipment needed for each learning center.	☐	☐	
	D. Daily routines (i.e, snack time, bathroom break, lunch money collection).	☐	☐	

		Yes	No	Comments
Learning centers				
18.	***The classroom is organized into four or more of the following learning center areas***			
	A. Construction	☐	☐	
	B. Library	☐	☐	
	C. Cooking	☐	☐	
	D. Game	☐	☐	
	E. Multisensory	☐	☐	
	F. Exploration	☐	☐	
	G. Art	☐	☐	
	H. Dramatics	☐	☐	
	I. Motor Development	☐	☐	
	J. Other	☐	☐	
19.	***Each center carries out a theme.***	☐	☐	
20.	***Learning centers***			
	A. Introduce new concepts and skills.	☐	☐	
	B. Practice concepts and skills.	☐	☐	
	C. Help each child to take responsibility for his or her own learning.	☐	☐	
	D. Provide a variety of activity choices to enhance individualized instruction.	☐	☐	
	E. Integrate psychomotor, affective and cognitive development.	☐	☐	
	F. Provide independent exploratory/discovery learning experiences.	☐	☐	
21.	***Activities at each center account for a range of levels.***	☐	☐	
22.	***Centers are developed that are an outgrowth of children's interests and needs.***	☐	☐	
23.	In managing learning centers			
	A. Whole group or small group planning sessions are used to introduce learning centers to children.	☐	☐	

		Yes	No	Comments
B.	Expectations for children's behavior at the centers are clearly communicated to children.	☐	☐	
C.	Children use a system that limits the number of participants in each center (e.g., pocket chart, choice board, keys.)	☐	☐	
D.	There are enough centers in the room for all children to be involved, limiting each center to five or less participants at any one time.	☐	☐	
E.	Centers are available to the children at various times during the day.	☐	☐	
24.	***Materials located at each center***			
A.	Relate to the center theme.	☐	☐	
B.	Extend individual growth of children.	☐	☐	
C.	Support a range of child levels.	☐	☐	
D.	Are primarily manipulative.	☐	☐	
E.	Can be used successfully by the children.	☐	☐	
25.	***Evaluation of child growth at learning centers is obtained***			
A.	As an adult interacts with a child during an activity	☐	☐	
B.	As an adult observes a child.	☐	☐	
C.	By reviewing work the child has completed at the center.	☐	☐	
D.	By holding conferences with the child.	☐	☐	

Resources for Locating and Reviewing Instructional Materials

Many professionally prepared, commercially published reviewing sources which are available in school media centers, system media collections, public and academic libraries are listed in

Selected Sources of Information on Education Media, available from Media Field Services, Division of Educational Media Services, Georgia Department of Education, 156 Trinity Avenue S.W., Atlanta 30303

Aids to Media Selection For Students and Teachers, available from U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Elementary and Secondary Education, Office of Libraries and Learning Resources, Washington, D.C.

Sources of Information/Ideas

Two indexes providing periodical article citations and reviews of publications related to early childhood programs development, media and instruction are

Education Index. New York, H. W. Wilson, Company. Indexes over 300 serials.

Library Literature. New York, H. W. Wilson, Company. Indexes over 200 periodicals.

COMMUNITY SOURCES

Some community sources of materials for the teachers are local public libraries, the Georgia Learning Resources System (GLRS), Cooperative Educational Services Agencies (CESA), teacher centers, community colleges and local service and governmental agencies.

Sources from the Georgia Department of Education

The Georgia Department of Education provides resources and services which are available to teachers and students through their media centers.

Division of Educational Media Services, Instructional Resources Unit

The following catalogs and schedules of resources produced or distributed by the division are available from school building media centers or system media contact persons.

Catalog of Classroom Teaching Films for Georgia Schools and Supplements. Audiovisual Services, Georgia Department of Education, 1066 Sylvan Road SW, Atlanta 30310.

Catalog of Classroom Teaching Tapes for Georgia Schools and Supplements. Audiovisual Services, Georgia Department of Education, 1066 Sylvan Road SW, 30310.

Instructional Television Schedule for Georgia Educational Television Network. An update is mailed monthly to school systems in the reception area for distribution to media specialists. Instructional Resources Unit, Georgia Department of Education, 1540 Stewart Avenue SW, Atlanta, Georgia 30310.

- ***Division of Planning Research and Evaluation***

Educational Information Center (ERIC). Georgia Department of Education, 212 State Office Building, Atlanta, 30334.

Research service is provided to Georgia public school administrators and their central office staff. Computer and manual searches of Educational Resources Information Center (ERIC) data base which includes over 325,000 references to education documents related to exemplary projects and model teaching strategies can be requested by the media staff through the system media contact person.

- ***Division of Public Library Services***

Readers Service. Public Library Services, Georgia Department of Education, Atlanta 30334.

"Selected List of Books for Teachers" (and supplements) and "Periodical List" (and supplements) identifying titles in the Public Library Services collection can be obtained by the school media specialist on request. Georgia Library Information Network (GLIN), another reference and bibliographic service, provides access to publications in the collection of academic libraries. Long-term loans of children's books can be arranged by the media staff. Books, pamphlets and periodicals are available for workshops and inservice activities as well as individual use.

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Chapter Three

Personalizing The Curriculum

Our resolution of human differences will not take place in a melting pot. Instead, we must think of the example of a mosaic pattern or stained glass window in which all the pieces fit together while individual identity is preserved.

Paul Tanaka

What Is a Personalized Curriculum?

The term "personalized curriculum" describes a plan, guide or outline for instruction to enhance the learning experiences of children. Personalization can be distinguished from individualization in that it recognizes not only differences in learning rates but also differences in what is learned and how it is learned. Such a plan recognizes that children mature at different rates and that all learners follow unique physical, social and academic growth patterns. A personalized curriculum, to be most effective, is developed cooperatively by parents, teachers and support personnel. This cooperative development on the part of educators and parents provides a means by which a curriculum may account for a variety of personal factors related to a particular group of children. Curriculum allows children to reach whatever competency level they can, without premature or unreasonable pressures for academic performance. Differences in rate are recognized as well as differences in learning styles.

Implications for Planning

Personalization recognizes that children have a wide range of sophistication. This section outlines the process through which parents, teachers, media specialists, administrators and children can arrive at a curriculum personalized to meet their own needs and goals. The process of personalization implies several things for curriculum planning. Because children are becoming more sophisticated in this world of rapid change, teachers must consider the fact that most groups of children will represent a wide range of sophistication. This is due, in part, to the increasing variety of experiences to which children are exposed and the decisions they must make related to that experience. For example, the eight year old of 1980 may very possibly be in need of material thought suitable for a 10-year-old child 10 years ago. One must consider that the developmental range in a group of children will be very wide. Planning must provide for a range of experience and abilities when developing individual instructional units.*

Personalization recognizes that children have a wider range of thinking ability. Another implications of personalization of planning is the fact that the age of a child is not necessarily indicative of the level of thinking. Within a group of seven year olds, for example, individuals may be found who display characteristics more typical of the four-to-six year old as well as those who fit the description of the nine-to-11 year old.** Because of this range of development, materials and activities selected for personalized instruction must be presented in different ways to different children.

Flexibility of organization is a key to success. Because the domains of development (psychomotor, affective and cognitive) are interrelated, the potential of each child can only be fully realized through carefully planned integrated experiences. Planning for a personalized curriculum must support this total development of the child. In planning, however, although integration is desirable, sometimes certain skills and concepts may need to be addressed in isolation from other skills and concepts. For example, following the implementation of an integrated unit, assessment of children may determine that one or two children have not mastered an objective of the unit (e.g., ability to form subsets). Further instruction will be necessary for those children and they may require additional patterns of instruction. This flexibility of organization is essential to personalized instruction for all children.

The school is one of several interrelated influences on children. Planning for this totality of experience ideally involves teachers working together and with parents, aides, administrators, specialists and resource people. Short range planning will include some of those persons and will definitely include the children. Personalization is facilitated by using various community resources. When children are taken into the community or individuals invited into the classroom to take part in planning instruction, the school is no longer a separate institution but is part of an interrelated group of influences upon a child's life. Reality cannot be attained in any curriculum that ignores any segment of the interrelated group.

* *Refer to Chapter One for a description of developmental levels and needs of children and implications of this information for the teacher.*

** *See Tables three and five in Chapter One.*

Personalization means preparing for the future. Life will provide an array of choices for each citizen. The ability to choose and the choices that children make will, to a great extent, determine their future. In planning, the importance of educating children to recognize their roles in determining this future must be considered. The teacher must plan to prepare a child to develop a personal image of the future and to realize that his or her behavior will determine it. As Montessori said (1963)

The child, making use of all he finds around him, shapes himself for the future.

Through experience, the child learns about the world in a natural way. For example, the child who is experiencing a first thunderstorm may physically feel the drop in temperature, see the clouds and lightening, hear the thunder and cognitively associate these experiences with the rain. Affectively, the child may feel apprehension or excitement at the approach of the storm and move swiftly to cover. Experiencing the world in "a natural way" has meant that each of the domains of development has been involved in the learning experience.

What Is an Integrated Curriculum?

When one considers the natural way children learn, the need for an integrated curriculum becomes apparent. The brain organizes stimuli from the cognitive, psychomotor and affective domains to provide the individual with a single integrated perception. It is this integration process that leads to effective learning, as stated by Lenguis (1980).

If it is our brain's orientation to 'get it all together,' surely our schooling should do no less.

In getting it all together, the educator must consider a plan in which all three domains of development are deliberately accounted for and integrated in the planning of classroom activities. This guide is a sample curriculum plan in which the following curriculum pieces are identified.

- Processes
- Content Areas
- Domains

The following discussion is intended to identify and describe each of these curriculum pieces, identify objectives for children's growth for each piece and discuss how these pieces may be integrated into children's activities.

In this sample curriculum plan, an emphasis for children's growth is placed on thinking. The ways in which children acquire, use and create knowledge have been referred to as processes. It is these processes of thinking and doing that allow the child to engage in and further develop skills, knowledge and experiences in a "natural way." This interactive view of learning provides an integrated model for curriculum development. The following processes have been identified from the literature on child development for use in this curriculum plan, and are presented in Table 11.

Table 11
Processes of Thinking

Process	Characteristics
Observing	Gaining, organizing, using or creating information. Perceiving or obtaining information through looking, listening, feeling, smelling, touching, tasting.
Selecting	Choosing, picking out, discriminating between or among several elements, objects or ideas.
Identifying	Ascertaining the origin, nature or characteristics of an item; labeling.
Relating	Associating elements, objects, events or ideas in some way.
Classifying	Arranging elements, objects, events, or ideas, according to common characteristics, into a system of grouping or subgrouping.
Interpreting	Explaining or representing the meaning of an idea, event, quality, object or communication.
Analyzing	Breaking down a concept, problem, pattern or whole into its component parts systematically or sequentially, so that the relations between parts are expressed explicitly.
Inferring	Drawing a conclusion or deduction from facts, evidence or assumptions based on past experience.
Experimenting	Trying, testing, verifying a tentative explanation.
Hypothesizing	Proposing a statement as a possible solution to a problem.
Predicting	Foretelling or forecasting eventualities by using past experience or accrued knowledge.
Measuring	Determining the amount or degree of a specified property of an element or set of elements by making comparisons to designated units.
Communicating	Receiving, comprehending, transmitting, interchanging information and ideas.
Synthesizing	Putting together elements by arranging and combining to form a structure, pattern or product.
Formulating models	Combining elements or ideas into a structure that can be expressed through words, symbols or visual representations.
Evaluating	Making a judgement regarding quantity or quality on the basis of a set of criteria.
Interacting	Acting on, between and among people and their environment.

An integrated curriculum accounts for content areas. In this curriculum model, the traditional content areas are considered together in planning experiences for children. Objectives for children's growth as related to traditional subject matter have been identified for each of the following content areas.

- Communication Skills
- Creative Arts
- Mathematics
- Science
- Social Studies

An integrated curriculum accounts for the three domains. In order to put together a puzzle — or a curriculum — one must have a clear view of each distinct piece. Thus psychomotor, affective and cognitive domains are presented separately, so that each can be clearly understood. However, to be functional in planning educational experiences, objectives chosen from all domains must work in conjunction with each other. Learning involves the whole realm, with affective, cognitive and psychomotor experiences occuring simultaneously. A child does not learn with intellect today, feelings tomorrow and physical abilities the next day. All work together. Teachers must plan in the same manner. Means for integrating the curriculum pieces will follow the presentation of the three domains.

Psychomotor Domain

Most, if not all, classroom activities require the use of motor behavior of some type. Whether children are speaking to each other during sharing time, reading a book to locate some information or passing out napkins during snack time, they must be able to use a number of voluntary movements to successfully participate in the activity. Psychomotor abilities are needed across the domains of development. For example, in order to adequately express inner feelings via facial expression and gestures, a sophisticated level of movement control is required. Movement is basic to all living things and therefore must be of great concern to the educator.

The psychomotor domain is absolutely essential to demonstrate cognitive knowledge or affective feelings. Because movement involves thinking and feeling it is virtually impossible to isolate movement in one clear-cut domain. This interrelatedness sometimes causes problems in attempting to classify a particular behavior. Harrow (1972) explains that because everything has a motor origin, and because the major concern of most educators is for the cognitive development of students, this may critically diminish consideration of this domain in planning classroom activities. Harrow challenges this position based on the fact that psychomotor behavior is absolutely essential for one to demonstrate, use or apply cognitive knowledge to a particular setting. Psychomotor abilities, according to Harrow, will determine the success or failure of a student's activity.

Handwriting instruction is a good example. If the teacher is assessing the content of written work, the cognitive domain may be of particular concern, but if the child cannot produce an accurate configuration of letters, which relies almost entirely on psychomotor abilities, this content may be impossible to produce or assess. Consideration of the interrelatedness of the psychomotor domain with the affective and cognitive domains is absolutely essential to educational planning and will, therefore, be modeled and emphasized here. Before presenting a means for directly interrelating the domains, however, the psychomotor domain will be presented in isolation to give the educator sufficient knowledge of the psychomotor elements to be integrated.

For the purpose of this guide, "psychomotor" is defined as all observable voluntary human motion. The classification of movements in an orderly fashion will be accomplished by modifying and utilizing the taxonomy presented by Harrow (1972). This taxonomy is presented in Table 12.

ble 12
A Taxonomy of Psychomotor Development

1.00 **Movement Abilities.** Abilities used to move, to manipulate things or to creatively express or interpret.

1.10 **Basic Movements**

1.101 **Locomotor Movements.** Those movements which transport the learner from one location to another (e.g., running, jumping, hopping, climbing, skipping).

1.102 **Non-Locomotor Movements.** Those movements which do not involve a learner in changing location (e.g., pushing, swaying, stretching, bending, twisting).

1.103 **Manipulative Movements.** Movements which involve grasping and releasing (e.g., writing, drawing, cutting, stringing, hammering).

1.20 **Skilled Movements.** Complex and efficient movement that requires and reflects practice and mastery (e.g., hitting a tennis ball, catching, batting, gymnastic skills, typing, piano playing, weaving).

1.30 **Creative Movements.** Movements which express or interpret experience (e.g., facial expression, dance, gestures).

2.00 **Perception Abilities**

2.10 **Use of Senses.** The ability to use one's senses to interpret and adjust to the environment.

2.101 **Tactile**

2.102 **Auditory**

2.103 **Visual**

2.104 **Olfactory**

2.105 **Tasting**

2.20 **Combinations of Advanced Perceptual Motor Skills**

3.00 **Physical Abilities.** Characteristics of organic vigor which are essential to the development of movement.

3.10 **Endurance.** Ability to sustain physical effort.

3.20 **Strength.** Ability to exert a maximum amount of force against resistance.

3.30 **Flexibility.** The range of motion that the learner is capable of achieving in the joints of the body.

3.40 **Agility.** The ability to perform quick, precise and spontaneous movements.

3.50 **Speed.** The ability to move swiftly.

Refer to Appendix C for a detailed listing of objectives for psychomotor domain contained in Psychomotor Domain objectives for Planning.

Affective Domain

The integration of the affective domain into all activities will enhance the education of children. The affective domain deals with the social and emotional development of the child. As such, this domain is an integral and central part of the continuing educational process, and will enable children to understand, relate and value development in the other domains.

The content of the affective domain places an emphasis on personal development. This emphasis is increasingly important because individuals today face depersonalization in many facets of their lives and because bureaucracies and impersonal relations are commonplace. The individual may often experience a feeling of powerlessness in the face of masses of people and mass communication. The individual needs help in dealing with these feelings, not at the expense of society, but in the context of society.

A person's feelings of control over environment, destiny, relations with others and relations with institutions are of primary importance in ensuring a society in which one can effectively meet the challenges of "the most probable future world" (Shane, 1977). To this end, personal development can best be fostered by comprehensive developmental programs of education beginning with early childhood and continuing throughout the adult years. This developmental perspective emphasises the child's current needs and concerns.

To organize and further define the affective domain of this sample curriculum plan, five key concepts have been identified. They are basic ideas around which objectives for children's growth may be organized. Table 13 represents a listing of these key concepts.

Processes unique to the affective domain are discussed by Krathwhol, Bloom and Masia (1964). They are presented as a developmental continuum because development in the affective domain continues throughout one's lifetime. The processes presented in this continuum are used each time a new affective concept is dealt with by the individual. Everyone, young and old, encountering a new concept, begins with the first process described on the continuum — awareness at the receiving level. As additional experiences with the concept occur, one progresses through the processes of responding, valuing, organizing, generalizing and characterizing. Different persons may be at different levels for the same concept while one person may have progressed to different levels for different concepts. Table 14 presents this continuum of affective development based on the writing of Krathwhol, Bloom and Masia (1964).

Table 13
Key Concepts Used in the Affective Domain

1.00 **Self-understanding**

1.01 The uniqueness of oneself.

1.02 How to effectively manage self and environment.

2.00 **Interpersonal Relations**

2.01 Relationships with family, peers and other adults.

2.02 Establishing relationships with family, peers and other adults.

3.00 **Feelings**

3.01 Identification of feelings and the understanding of concerns, beliefs and feelings.

3.02 How feelings influence behavior.

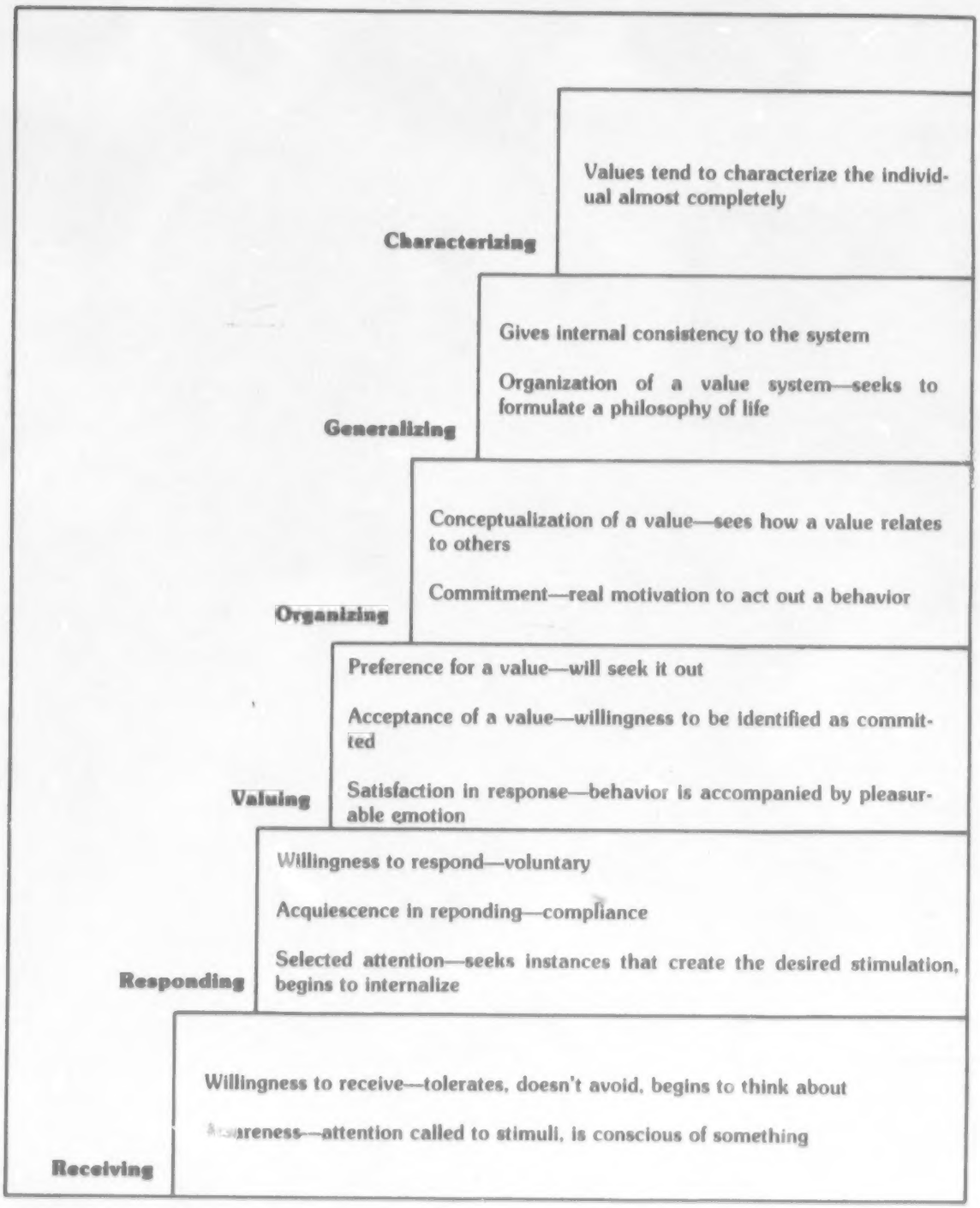
4.00 **Values and Experience**

4.01 Understanding how one's experiences affect one's values.

5.00 **Change**

5.01 Understanding the need for anticipating and dealing with change.

Table 14
A Continuum of Affective Processes


Characterizing
Values tend to characterize the individual almost completely
Generalizing
Gives internal consistency to the system
Organization of a value system—seeks to formulate a philosophy of life
Organizing
Conceptualization of a value—sees how a value relates to others
Commitment—real motivation to act out a behavior
Valuing
Preference for a value—will seek it out
Acceptance of a value—willingness to be identified as committed
Satisfaction in response—behavior is accompanied by pleasurable emotion
Responding
Willingness to respond—voluntary
Acquiescence in reponding—compliance
Selected attention—seeks instances that create the desired stimulation, begins to internalize
Receiving
Willingness to receive—tolerates, doesn't avoid, begins to think about
Awareness—attention called to stimuli, is conscious of something

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The receiving, responding and valuing levels of the continuum are used in this sample curriculum plan because these are the levels most often reached during the early childhood years. However, the teacher needs to be aware that young children can be at any point on the continuum for a particular concept. The following definitions are used to describe the three affective processes used in this guide.

- ***Receiving.*** This level of affect includes awareness, willingness to receive and selected attention. It implies perceiving or acquiring without judgment.
- ***Responding.*** The levels are acquiescence in replying, willingness to respond and satisfaction in response. This implies a low level of commitment and may be accomplished physically or emotionally.
- ***Valuing.*** Deciding if a thing, phenomenon or act has worth. It implies the acceptance of a value and willingness to be indentified with it, preference for a value and loyalty and consistent behavior relative to it (commitment).

The processes indentified above may occur in an individual in immediate succession, as in a child's interaction with a loving parent. In this example the child receives the expression of affection, responds to it instantly and values it because of its meaning. The processes identified above may also occur over a longer period of time; that is, over a period of days, months or years. For example, a young child first receives the message of "no" without responding. After a period of time, the child responds to the message of "no" by stopping the behavior. After a longer period of time the child values the message "no" based on experiences which consistently communicated care and concern on the part of the parent.

In order to personalize experiences for each child, it is important to assess the child's experiential background as related to objectives for the child's growth. This assessment will determine where on the continuum each child is functioning and will, therefore, determine the objectives to be used in planning. As is true for all domains of development, assessment should account for

- level of growth and understanding of the learner;
- interests and concerns of the learner;
- past experience of the learner.

In order to help teachers integrate objectives for affective growth into most classroom activities, the key concepts and processes described above have been used to develop objectives in the area of affective growth. In general, each listing of objectives for a key concept reflects the continuum of growth described in Table 14.

Refer to Appendix b for a detailed listing for the affective domain contained in affective domain objectives for Planning.

Cognitive Domain

Thinking is a way of learning. Thinking is one way of inquiring for facts . . . and if this thinking is to some purpose, the facts so found will be relevant to some purpose.

Raths

The cognitive domain refers to that area of development which supports one's ability to think — to obtain, think about, organize and create knowledge and understanding. Traditionally schools have focused on subject matter to develop these abilities. Although subject matter is a helpful vehicle to organize knowledge, too often this orientation to education has limited children's ability to retain or apply this knowledge of future experience. For this reason other processes of thinking have been incorporated into

many curricula for young children. In these curricula both process and knowledge are identified and combined in the development of objectives for children's growth. This approach to the development of objectives for the cognitive domain has been used in this sample curriculum plan.

As Georgia curriculum experts surveyed the cognitive objectives contained in the 1980 publication, *Essential Skills for Georgia Schools*, they recognized that objectives in one subject matter area overlapped objectives in other subject matter areas. Using the American Association for the Advancement of Science's *Science: A Process Approach* (1970) as a source, these educators identified a list of processes. The next step is identifying objectives contained in *Essential Skills for Georgia Schools* under one of the processes. Using the nine basic processes defined in this handbook, all of the subject matter objectives were placed under one of the processes. The final step was to identify categories in order to reduce the number of processes.

Subject matter areas in this plan are referred to as content skills. The following content skill areas were used in the development of objectives for the cognitive domain.

- Communication Skills
- Creative Arts
- Mathematics
- Science
- Social Studies

The processes identified in Table 11 have been grouped into nine process categories. These process categories include

1.00 Observing/selecting/identifying

2.00 Relating/classifying

3.00 Interpreting/analyzing

4.00 Inferring/experimenting/hypothesizing/predicting

5.00 Measuring

6.00 Communicating

7.00 Synthesizing/formulating models

8.00 Evaluating

9.00 Interacting

For each of the nine process categories, objectives have been identified from the content areas presented above. In presenting the objectives, some content areas may be excluded for some process categories due to the sophistication level of the objectives as identified in *Essential Skills for Georgia Schools*.

Refer to Appendix D for detailed objectives for the cognitive domain contained in cognitive domain objectives for planning.

The process for identifying student objectives as well as the listing of objectives contained in Appendix B, C and D are meant to be illustrative of a curriculum development process. Each local system will need to consider how local educational objectives may be merged with or replace the objectives identified in this guide. A school system which has identified objectives for children's growth may wish to organize those objectives under the process categories identified in this document.

Program Evaluation Checklist
Personalizing the Curriculum

		Yes	No	Comments
1.	*The curriculum reflects opportunities for individual experience and child development within the continuum of objectives.*	☐	☐	
2.	*Materials and activities are presented to children in a variety of ways.*	☐	☐	
3.	*Skills and concepts are presented to children through integrated activities.*	☐	☐	
4.	*Some activities are planned to reinforce one skill or concept.*	☐	☐	
5.	*The curriculum supports the total development of the child.*	☐	☐	
6.	*Curriculum planning involves*	☐	☐	
	A. Other teachers	☐	☐	
	B. Parents	☐	☐	
	C. Aides	☐	☐	
	D. Administrators	☐	☐	
	E. Specialists	☐	☐	
	F. Community resource people	☐	☐	
Cognitive Domain				
7.	*One or more thinking processes are identified as a focus for development.*	☐	☐	
8.	*Objectives from the following content areas are used in planning activities*	☐	☐	
	A. Health education	☐	☐	
	B. Communication arts	☐	☐	
	C. Creative arts	☐	☐	
	D. Foreign language	☐	☐	

		Yes	No	Comments
E.	Health	☐	☐	
F.	Mathematics	☐	☐	
G.	Physical education	☐	☐	
H.	Safety	☐	☐	
I.	Science	☐	☐	
J.	Social studies	☐	☐	
Psychomotor Domain				
9.	***Psychomotor abilities are considered in planning each indoor and outdoor activity***	☐	☐	
A.	Movement abilities	☐	☐	
B.	Perception abilities	☐	☐	
C.	Physical abilities	☐	☐	
10.	***Psychomotor objectives are identified*** **for classroom activities.**	☐	☐	
Affective Domain				
11.	***Affective objectives are considered in planning learning centers as related to one or more of the following concepts***	☐	☐	
A.	Self understanding	☐	☐	
B.	Interpersonal relations	☐	☐	
C.	Feelings	☐	☐	
D.	Values and experience	☐	☐	
E.	Change	☐	☐	
12.	***Levels of affective development are considered in planning learning center activities (e.g., receiving, responding, valuing).***	☐	☐	

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Chapter Four

Personalizing Unit Planning

A primary responsibility of educators is that they not only be aware of the general principle of the shaping of actual experience by environing conditions, but they also recognize in the concrete what surroundings are conducive to having experiences that lead to growth.

John Dewey

Unit planning is a familiar concept to most classroom teachers. It provides a practical means for planning and organizing activities within an integrated curriculum. The unit provides a means of organizing objectives for children's growth across the domains (affective, cognitive, psychomotor) into an integrated vehicle for instruction.

Components of a Unit

A unit is composed of several parts which together provide the basis for teacher planning. Consider Figure One which presents the parts of unit planning and Figure Two which presents these parts in relationship to each other.

Figure One
The Parts of Unit Planning

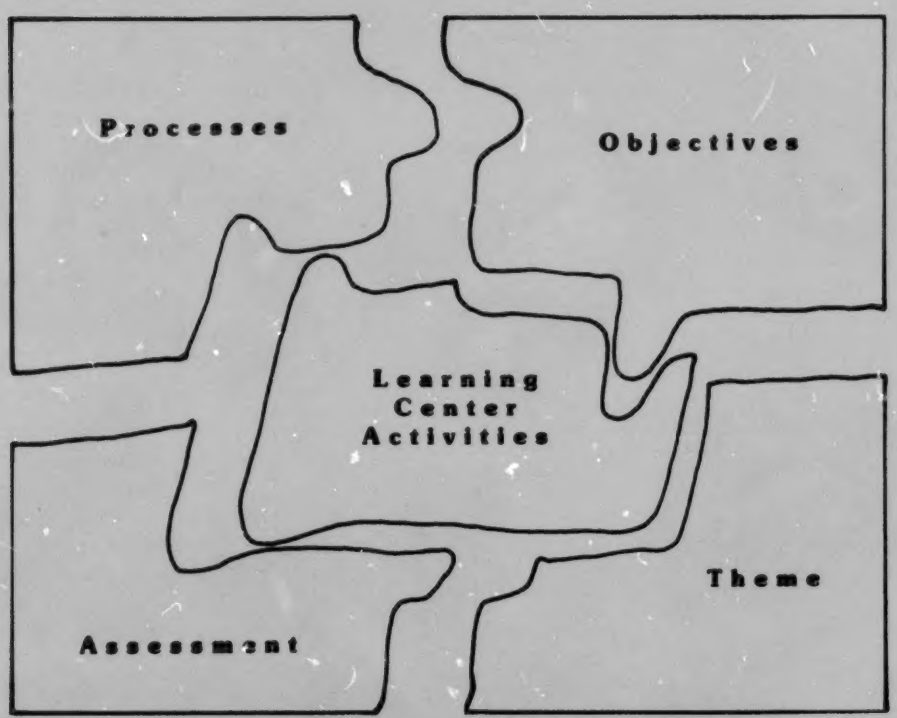
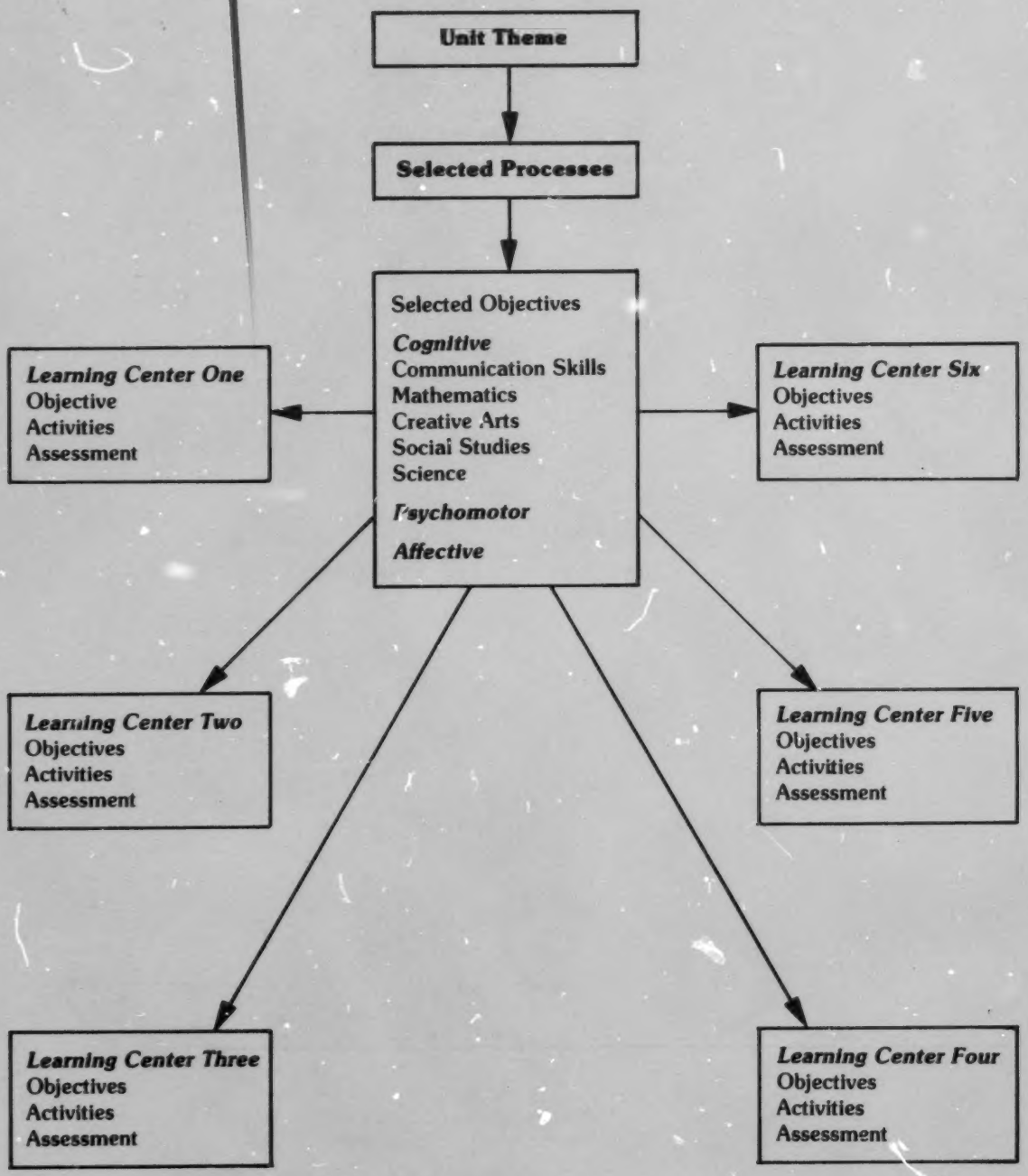


Figure Two
Organization of a Unit Plan



Unit Planning

Flexibility is an advantage of unit planning. The process for unit development may be approached in a variety of ways. Any of the components presented in Figures One and Two may be used as the starting point for developing the unit.

A unit theme is an idea or concept around which a unit is organized. Unit themes will be selected based on the interests and needs of the children. Sample unit themes might include

- Learning about myself
- The world of work
- Using and conserving natural resources
- Space travel

Each learning center will be related to the unit theme. Learning center themes will be selected which can provide a focus to develop a basic concept related to the unit theme. For example, in developing learning centers related to the unit theme "The World of Work," the following learning center themes may be appropriate: "What It Takes To Be A Good Worker"; "What Kind of Work Do You Like To Do"; "Classroom Work"; "Family Work"; "Finding Work." Each learning center and every learning center activity will be focused on the unit theme, in addition to fostering specific objectives from each of the domains.

A process category may also be used as the first step in unit planning. The unit theme, learning center themes and objectives will then be selected.

Selection of Learning Centers is many teachers preferred method of starting the planning of a unit. Learning centers may be identified and organized which provide a range of activities. They meet the needs of the children with experiences which focus on multiple skills and at least one process category. Learning centers are the vehicle for integrating the objectives of a curriculum. As such, each learning center activity must facilitate one or more objectives for children's growth. Classroom activities may accomodate a range of learning styles as well as abilities of children. All activities in the unit will be related to the unit theme and integrate selected objectives for children's growth.

Consideration of the assessment records of children's growth is another way to begin planning a unit. Which areas of growth appear well mastered? Which areas of growth appear in need of more support? What is the range of growth in each area? Continuous assessment allows the teacher to keep records which are extremely helpful in planning a unit. Based on a study of the assessment records, the teacher may select a theme based on a particular need of many; e.g., "The World of Fractions," "Getting the Information You Want," etc. The teacher may select particular objectives as a focus for each of the learning centers, or the teacher might organize learning centers and activities which are of particular interest to children and focus on the children's particular growth needs. In using assessment as a beginning point in planning a unit, the teacher's observation of the child's prior participation in classroom activities is essential. Needs and abilities recorded over a period of time in a variety of ways is the basis for selecting objectives, activities and even the unit theme. See Chapter Five for more specific information concerning assessment and record keeping.

Development of a unit, then, may occur in a variety of ways, but the planning will include all of the following.

- Selection of a unit theme
- Selection of one or more process categories
- Selection of learning center theme activities
- Identification of objectives for children's growth from all three domains for each learning center
- Identification of activities and materials for each learning center
- Identification of assessment and record keeping devices

Organizing the Unit

How the teacher organizes the unit will vary with the experience and interests of both the teacher and the children. The following planning formats are presented for your consideration to assist you in developing an effective and efficient organization process.

General planning: identification of unit theme, learning center themes and general areas of objectives. This form may help the teacher organize a skeleton plan for the unit. The teacher is reminded that, as discussed above, any components of a unit may serve as the starting point in planning.

Learning center planning sheet. More specific identification of learning center objectives, activities and materials may be identified using this planning form. Note that there is room on this form to record how the teacher will introduce the center to the children.

Recordkeeping. This sample form allows the teacher to record specific growth related to each of the objectives of the unit. The coding system allows an efficient means of recording this information over the period of time the unit is being implemented.

These planning sheets were designed to serve as guides for the teacher in selecting and recording objectives to be included in planning the unit. The teacher can see at a glance whether objectives are included from all areas of the curriculum. Some units may not be appropriate for developing objectives from certain areas of the curriculum, but these objectives can be included in other units. This is the advantage of developing a consistent planning format. As time passes, the teacher can plan for areas where there are obvious gaps, and over the year all areas of growth will be accounted for.

Sample Unit Plans

Appendix E contains completed sample unit plans for your consideration. These samples will clarify questions raised by the previous discussion, and should instill in the reader a feeling of confidence. All of these unit plans were developed by classroom teachers working in planning groups of three to four. Some worked on a unit to be used at a particular grade level, others developed a unit plan for use with children kindergarten through fourth grade. All of the teachers developed the unit with a particular group of children in mind so that the special interests and needs of these children were the criteria for selecting unit objectives and activities.

Having completed the development of these units, the teachers wished to communicate the following to other classroom teachers.

- Group planning was an efficient and effective means of planning a unit.
- In developing a unit, a teacher does not have to have the unit completely developed before implementing it. Much of the planning can be ongoing as projects develop and questions for study arise, thus involving children in day-to-day planning.
- Flexibility is a key to planning. Teachers need to be flexible in working out ideas with other teachers and in incorporating the ideas and thinking of the children into planning.

The diversity of the sample units illustrates the flexibility inherent in their development and implementation. Keep in mind that not all of the objectives and activities identified will be relevant to a particular group of children.

General Planning: Identification of Unit Theme, Learning Center Themes, and General Areas of Objectives

Unit Theme: _____

Selected Process Categories: _____

	Center Themes	Psychomotor Objectives	Affective Objectives	Cognitive Objectives				
				Communication Skills	Creative Arts	Mathematics	Science	Social Studies
1.								
2.								
3.								
4.								
5.								
6.								

Learning Center Planning Sheet

Unit Theme: _____

Center Theme: _____

Introduction to Center: _____

Generalizations	Objectives	Activity Options	Center Materials

Assessment:

Record Keeping

Unit Theme: _____

Center Theme: _____

Explanation of code:
- – demonstrates less than satisfactory performance
- x demonstrates satisfactory performance
- \+ demonstrates consistent success and understanding

Objectives	**Children's Names**												
	Darnell	**Richard**	**Mary**	**Susan**									
Psychomotor													
1.													
2.													
etc.													
Affective													
1.													
2.													
etc.													
Cognitive													
1.													
2.													
etc.													

Program Evaluation Checklist
The Planning of a Unit

	Yes	No	Comments
Unit Theme			
1. Selection of theme is based on			
A. Children's interest	☐	☐	
B. Learning activities	☐	☐	
C. Curriculum goals	☐	☐	
Process Categories are			
2. Personalized for individual children	☐	☐	
3. Identified for each unit	☐	☐	
4. Integrated into each unit activity	☐	☐	
5. Used as a guide for selection of objectives	☐	☐	
Objectives			
6. Objectives are selected from each of the domains with consideration of children's growth as related to			
A. Processes of thinking	☐	☐	
B. Knowledge and skills related to the content areas	☐	☐	
C. The continuum of affective processes	☐	☐	
D. The continuum of psychomotor growth	☐	☐	
7. Children may focus on different activity options depending on their personal needs and growth	☐	☐	
Activities			
8. Activities are related to			
A. The theme	☐	☐	
B. Objectives from across domains	☐	☐	
C. A range of ability levels	☐	☐	

	Yes	No	Comments
Resources			
9. Teachers and media specialists plan for identification of appropriate resources, effective use of existing materials and for acquiring resources to meet varied learning styles.	☐	☐	
10. Selection of resources is based on the curriculum, instructional strategies and learner needs.	☐	☐	
11. Resources are accessible to students, individually and in groups, throughout the school day, both from the media center and (through the media center) from the classroom.	☐	☐	
12. Students are encouraged to use a variety of resources, in both classroom and media center, individually and in groups.	☐	☐	
Activity options			
13. Activity options			
A. Account for independent learning	☐	☐	
B. Are available	☐	☐	
C. May be self-selected by the child	☐	☐	
D. Contain directions that are clearly communicated.	☐	☐	
E. Allow each child to be successful.	☐	☐	
Assessment			
14. Children's growth is consistently assessed as related to identified objectives for growth.	☐	☐	
15. Each unit activity provides for some kind of child assessment of growth.	☐	☐	

		Yes	No	Comments
Record Keeping				
16.	*System has been developed which efficiently provides the teacher with a current record of child growth.*	☐	☐	
17.	*The system accounts for growth in all domains.*	☐	☐	
18.	*The system accounts for development of thinking processes.*	☐	☐	

Chapter Five

Personalizing Child Assessment

'Tests are only hard when you know that somebody else is going to get mad at you when you don't do it right.'

Karen (Fifth Grader)

What is Personalized Assessment?

Assessment is the continuous process of appraising, evaluating and taking stock of the child's development across the three domains of development.

Personalized assessment considers the child's uniqueness. Assessment for the child must be personalized to account for her or his rate of maturity in physical, social and academic growth patterns. Personalized assessment also considers the child's uniqueness with respect to environment, values, learning style and present store of knowledge. Such personalization of assessment employs a variety of assessment techniques as well as a variety of sources of assessment information in order to gain a well-rounded picture of the child.

Who Participates in Assessment?

Because the teacher doesn't see the child in all settings, the input of others is an invaluable source of information. This information allows the teacher to more readily personalize assessment for the purpose of planning for student progress.

The teacher's assessment information needs to be supplemented by information from the child, parents, paraprofessionals, other school personnel and in some instances community resource people. However, it is important that teachers realize that they are responsible for compiling the assessment information for purposes of evaluation.

Personalized assessment involves the child. The child is very important in giving the teacher information necessary to support adequate classroom planning. The child may do this through conversation during individual and small-group meetings, by answering questionnaires and responding to checklists. The child may provide additional input through the questions asked and comments made during classroom activities. Another method is to involve children in the planning of a unit. This enables them to understand what is to be learned and how assessment is to be done for the unit.

The child should also be involved in self-assessment that provides immediate feedback as to whether a task has been mastered. For example, if the child chooses a card with the word "house" on it, the child knows immediately whether the correct word was given when the card is turned over and a picture of a house appears.

Involving the child in assessment aids the teacher in planning. Such involvement is of further value in that it helps the child develop an understanding of the purpose of assessment and appropriate assessment techniques.

Personalized assessment includes parents. Parent-provided information is important to planning the educational environment. Parents may provide assessment information through notes to the teacher, conferences, checklists that the teacher asks them to complete, telephone conversations and even through cooperatively planned units. If parents are to be helpful in the area of assessment they must be familiar with the objectives for their child. If not, they will not know what to look for. As a specialized resource, parents can help the teacher select appropriate objectives as well as assist with assessment for cooperatively planned units. Informed parents will begin to feel that "we're all in this together" and will more actively reinforce and support their child's education.

Personalized assessment includes community volunteers. Community resource people may also help in a variety of ways. As the teacher's resource in an area of interest, the community volunteer is able to help determine what should be learned during the unit. The volunteer may also be able to suggest some appropriate means of assessment. There are people in the community, such as retired teachers, who may volunteer to help with the instructional program. As aides or tutors these volunteers need to be familiar with the objectives for each child with whom they work. Such familiarity enables the volunteer to know what to look for while working with a child.

Personalized assessment includes other school personnel. School personnel such as previous teachers, resource teachers, media specialists, teachers of special subjects, other current teachers of the

child, counselors and administrators are a fourth source of information concerning the child. They may provide information valuable to assessment through permanent records, notes, anecdotal records, past and current reports, conferences and checklists. Studying samples of the child's work from other school personnel may be very enlightening with respect to mastery of objectives across the three domains.

In some instances school personnel other than classroom teachers are responsible for psychometric evaluation of a child. In this case the teachers who work with the child on a daily basis should be made aware of the results of the testing.

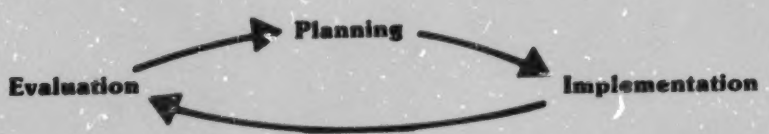
What is to be Assessed?

The teacher needs to consider the following three areas when deciding what is to be assessed.

- Child growth as related to understanding and accomplishment of curriculum objectives.
- Types of learning styles exhibited by each child.
- Special needs of each child.

Assessing child growth is continuous. Assessing child growth in the area of curriculum objectives is a continuous process. As a child accomplishes objectives, the teacher determines where the child is and responds to this information by planning and implementing activities. The child is then evaluated and the cycle continues. The following diagram illustrates this process.

The PIE Cycle for Teaching the Child



Teachers should make every effort to involve children in planning, implementation and evaluation. In the evaluation or assessment area children need honest and open feedback. This feedback should be given in positive terms with an eye to future planning (e.g., "I see great improvement in your letter shapes this week. Perhaps you should begin to concentrate on spacing between letters and words now.").

A learning style is a consistent method of responding to tasks. Children display a wide variety of learning styles. Learning styles are defined as the consistent ways in which an individual responds to a wide range of perceptual and intellectual tasks. It is important to identify learning styles so the teacher knows the best environment or context in which a child learns (e.g., independently or in a group, in a noisy room or a quiet one), and so that the teacher can help modify personal style when it interferes with learning (e.g., the child who needs constant praise may be encouraged to work for longer periods of time without praise).

Learning styles reflect a child's world view. In order not to lose sight of this world view, it is important to think of individual differences in broad categories. Most of the following learning styles are presented to indicate a range of behavior; some are presented as types. Keep in mind that children will exhibit varying degrees of several learning styles and that cognitive learning styles tend to change over time.

The rate at which a child learns is often confused with the capacity or ability to learn. Children who work or learn slowly may be cautious, sluggish or reflective. The quick learner may be accurate or inaccurate, impulsive or anxious to finish a task.

Recognition of the numerous learning styles of children makes it even more imperative that teachers who want to truly personalize assessment in their classroom provide a wide variety of assessment modes and activities.

Table 15
Cognitive Learning Styles

The child works or learns	
with new materials or situations.	with familiar materials or situations.
impulsively (quickly without exploring possibilities).	reflectively (takes time thinking through possibilities; then makes choice).
with visual materials.	with auditory materials.
with kinesthetic materials.	with tactile materials.
independently.	cooperatively in groups.
in child-selected tasks.	in teacher-selected tasks.
in the morning or midday.	in the afternoon or evening.
with little pressure.	with much pressure (in the form of tests, deadlines).
with little praise.	with much praise.
when allowed to choose the conventional or "right" answers.	when allowed to respond in unexpected, unconventional ways.
with a sense of humor.	without a sense of humor.
in quiet environment (essentially quiet, though there may be slight background noise).	in noisy environment (TV, radio, music, conversations taking place).
sitting or standing.	reclining.
in gross motor activities (running, climbing, jumping).	in fine motor activities (cutting, writing, drawing).
in several short term study or activity periods.	in one long term study or activity session.
with sensitivity and responsiveness to animals, people and inanimate objects.	without sensitivity and responsiveness to animals, people and inanimate objects.
with much flexibility in range and number of adaptive shifts.	with little flexibility in range and number of adaptive shifts.
with self-acceptance and confidence in control over experiences.	without self-acceptance and confidence in control over experiences.

How to Assess

Teachers use a variety of techniques as they assess children's progress. Many informal teacher-developed techniques can be used in an integrated curriculum to cross the three domains and across subject areas. Examples follow.

Observation is a widely used technique in assessing children. The teacher can observe the psychomotor, affective and cognitive progress of children, for example, by observing a child classifying pictures of foods into food groups. The teacher should be able to determine whether the child recognizes different types of food, can manipulate the pictures easily and feels positively or negatively about the food or activity.

For a more complete picture, the child must be observed in many different situations at different times. It is important that the teacher record observations, because relying totally on memory can lead to inaccuracy.

The **teacher-child conference** is another method of assessment. It is sometimes referred to as an interview or discussion. Conferences should be held with large groups or individuals. Classroom observation does not permit much time to find out the reasons behind behavior. In the conference situation, the teacher can ask questions designed to assess a child's motivation. For example, if a child is doing a math problem that requires regrouping in addition, it is one thing to observe that the child has an incorrect answer. Only in dialogue can a teacher begin to identify the cause of the incorrect answer. Teachers should develop anecdotal records of significant information gained in conferences. Holding successful conferences is a complex skill for a teacher to acquire. Several things are important. First, ask open-ended questions such as, "What do you think happened?" Second, do not talk too much; the purpose of conferences is usually to get the child to talk. Third, summarize and clarify points raised during the conference. This helps both teacher and child clarify what has been discussed in the conferences and what, if any, subsequent action is necessary.

Conferences are also a teaching situation which helps children build self-assessment skills. The ability to analyze what has gone on so that future plans can be made is a goal of all educators. In the conference setting the teacher has the opportunity to model and teach this skill.

Work samples in the form of reports, projects, contracts, essays, teacher-made tests, drawings, paintings, child-written books, magazines and newsletters are often valuable in assessment. However, the younger the child the more likely that 1) the process rather than the product is the focus in the activity and, 2) the motives and reasons for creating the products are difficult to know. If the teacher decides to keep a work sample, it should be dated with anecdotal comments written on it.

Children's **essays** and stories may indicate their ability to organize their thoughts, write legibly, use correct grammar and demonstrate what they know and how they feel about a topic.

Projects, contracts and reports are additional means of assessing the child. A contract requires that the teacher and the child develop the objectives and the means of assessing them. Projects and reports may or may not be developed cooperatively, even though they will be evaluated. Such techniques allow the teacher to assess across domains as well as across subject areas. For example, the teacher might assess handwriting, content, grammar, persistence, independence, cooperation and goal-setting abilities. By keeping a checklist or anecdotal record, the teacher and the child are better able to plan for specific improvements.

Having **children evaluate their own projects and group projects** not only provides information about the child for the teacher but allows the child to participate and learn how to self-evaluate. This should be done on a one-to-one basis when the children are evaluating their own project. Evaluating group projects could be either one-to-one or in a group discussion. Determining clear objectives for the project before it is begun will provide more accurate and helpful evaluation information for the teacher and child.

Rating scales can contribute to the teacher's knowledge of the child. It is often helpful to have other school personnel who meet with the child also complete the rating scale for comparison purposes.

Two examples of rating scales are given here.

Numerical Rating Scale. The numbers 1 to 5 represent the degree to which the child possesses the trait; 0 representing an absence of the trait and 5 representing the presence of the trait to a high degree.

Does the child complete assigned tasks?

0 1 2 3 4 5

Graphic Rating Scale

Does the child complete assigned tasks?

not yet **seldom** **often** **usually** **always**

Questionnaires can be adapted to what the teacher is seeking. The format is dependent upon the child's ability to read and write. Younger children may be questioned orally.

Sample Questionnaire

1. Which center did you enjoy most?
2. What did you like about the center?
3. Which center did you enjoy the least?
4. What would have helped you to enjoy that center more?

Sociograms can reveal social relationships or isolation which may not be obvious to the teacher. The information obtained can be used in planning for the needs of children. Older children might write their choices while younger children could whisper their choices in the teacher's ear.

Some appropriate questions could include the following.

- With whom would you like to work in the center?
- Whom would you like to help you on the next project?
- Who are your best friends?

Child-kept **work records** supply differing amounts of information depending upon the child's abilities. Younger children might keep a work record such as a flower with a petal added for each center visited.

A second grade child might have a work record with more detail.

MY PLANS	Name: _____
Read a book	
Do a project	
Listen to a tape	
Do two games	

The child might check off the item when completed, write the date or write a descriptive sentence.

In addition to informal assessment techniques, a variety of **formal assessment techniques** are available to measure children's growth across the three domains. The use of standardized achievement tests within a total assessment program provides valuable information on student achievement.

Standardized achievement tests measure the student's achievement in the traditional content area. It is important in selecting a standardized test to check the degree to which the test items match the content area objectives outlined in the curriculum of the school system. While reading comprehension and mathematics are found in most batteries, the areas of listening, science and work study are not found in most achievement test batteries. Schools regularly use standardized tests to survey student achievement at all grade levels as a means of determining which schools and which areas of the curriculum need additional resources. Teachers may use the test results to plan instructional level objectives for the development of appropriate educational experiences for children.

Standardized tests are administered and scored under uniform conditions. These rules are necessary for the proper interpretation of test scores. Standardized tests are published because they appeal to or have usefulness for a wide range of students and teachers. Test administrators should scrupulously follow standardized administration and scoring if they want to compare their students with a norm group that has been tested under the same conditions. Because a norm is a distribution of scores attained by some specified group under uniform or standardized conditions, the selected test should have been normed on a population similiar to the children being tested.

Norm-referenced measures compare the child's performance to a norm group. Norm-referenced measures are designed to determine an individual's relative standing in comparison with an internal or external norm group. Standardized and achievement tests are norm-referenced tests because a "norm population," usually consisting of thousands of children, is used to establish grade/level scores and percentiles. In contrast, criterion-referenced measures compare the student, not in relation to others, but in relation to the level of performance which is expected to be achieved in a carefully defined domain of behaviors. Criterion-referenced measures compare the child's performance to a criterion.

The Georgia statewide testing program is an effort to provide information about student achievement in all of Georgia's schools. The criterion-referenced tests (CRTs) developed in Georgia relate to specific learning objectives in the area of reading and mathematics. The CRT results are reported in terms of success or non-success of students on each objective, not in terms of standard scores or grade equivalents.

The initial group of objectives selected for inclusion in the testing program were identified by means of a statewide survey of over 18,000 Georgia teachers. As additional grades have been added to the assessment program, committees of teachers and curriculum specialists have developed objectives appropriate to the particular grade, which have then in turn been reviewed by other educators from throughout the state. Test items are reviewed, revised or replaced in a process which is designed to update the various elementary grade tests about every three years.

In the development of the CRT for grades one through 12, three areas of information have been used in test item development

- thinking skills,
- competencies within the academic areas of reading and mathematics and,
- context of acedemic tasks/materials, everyday tasks/materials and employment activities/materials.

Each test item reflects all three of these areas. For example, given the thinking skill of interpretation, the competency area of figurative language and the context of academic and everyday materials, a broad objective was developed — e.g., the student interprets figurative language in the context of academic and everyday materials.

The state testing program is primarily designed to provide feedback to teachers about students to aid in planning instruction for each student. Criterion-referenced testing is not a panacea for all the problems relating to assessment, but it does direct attention to the performance and behavior which are the main purposes of instruction. Providing feedback relative to attainment of specific objectives rather than to a student's standing in a specified group enhances the instructional relevance of this type of assessment.

Georgia Kindergarten CRT

In 1978 the Georgia Board of Education directed the Department of Education to develop criterion-referenced measures appropriate for optional use in assessing language and mathematics skills in kindergarten. The specific objectives for which CRTs have been developed are found in the areas of "communication arts" and "number understanding" in the *Georgia Kindergarten Handbook*, adopted in December, 1978.

The Georgia kindergarten assessment has two major purposes — to provide diagnostically instructive information to a teacher on the abilities of individual children and to provide for identification of those children who may experience serious learning problems or who may need more intensive evaluation.

Test Taking Skills

For some children testing sessions provide an extremely threatening environment. If this is the case, it is difficult for the children to do as well as they might. If the child is very tense, or conversely very blase, the test results will not be a valid measure for the child. There are some ways in which teachers can prepare students for test taking prior to the testing session.

The teacher should talk with the children about tests. It should be made clear that a test is only one of many techniques used to assess their progress. Children involved in the assessment process will know other techniques by which their progress is measured.

Test Terminology

Teachers need to familiarize children with the vocabulary of tests. Examples of words that appear frequently in tests are

picture	sort	same
sound	draw	equal
circle	drew	score
line	put	middle
next	finish	alike
first	ready	different
beginning	left- and right-hand-corner	copy
end	choose	mark
right	stop	check
top	bottom	page

Teachers should examine the tests for other frequently used words to add to the above list.

Some test-taking techniques are common to most tests but not familiar to children. The teacher needs to provide practice activities using these techniques. The practice will be more motivating for the children when it takes place in a game-like, nonthreatening environment.

These test taking techniques can be practiced.

- Demonstration of visual memory skills
- Answering comprehension questions
- Building logical thinking process — talk it, demonstrate it, practice it
- Marking, circling, underlining, or X'ing correct responses
- Matching games to deal with — color, shape, design, words, phrases, rhymes, common beginnings, common endings, capital and lower case letters
- Classification games
- Activities that are timed
- The use of separate answer sheets
- Darkening in circles, squares and ovals
- Erasing cleanly and completely
- Writing names — last name, first name and middle initial
- Expressing the date as a series of numerals
- Answering questions out of order — easiest ones first followed by harder and hardest
- Establish a test-like experience by providing short periods of time when children may neither talk nor leave their desks or work areas for any reason
- Specific relaxation activities such as — take deep slow breaths and exhale slowly, stretch, rotate the head, circle the shoulders, wiggle the fingers and toes.

Recording and Reporting Assessment

Teachers often carry much of the information about children in their heads. Personalization of assessment is difficult because of diminished clarity of information. This implies the need to devise simple, quick recording methods that are at the same time comprehensive and usable. Such a system is to some degree dependent upon the teacher's style and situation, but keep in mind that to be effective, any record-keeping device is

- efficient to use
- easily available
- concise
- complete in relation to the purpose for which it is intended.

The following methods of recording information about children's growth may be useful.

Assessment Instruments. Several of the informal assessment instruments described previously can be kept as records. Some examples are contracts, rating scales, questionnaires, sociograms, inventories and work record devices.

Anecdotal records. One of the most widely used sources of on going evaluation data is teacher observation of children. For this to be productive, certain things must be remembered. A child must be observed in many situations to get an adequate view of total development. Because it is necessary to

observe children in different situations at different times, it is also necessary to write down some of these observations so that they can be accurately recalled. Although teachers often keep mental records, their accuracy is impossible to check. Teachers should keep anecdotal records of their observations. Record development related to program goals and indicative of a change in a child's statue in relation to these goals. Also record when change has not occurred in a reasonable time.

Keep records objective and short. A person should become a selective tape or video recorder. A tape recorder doesn't record why things are happening, but it is accurate. It does not record all children as running if one child gallops and the other child trots.

Below is an example of a functional anecdotal record.

RCG	**9/28 9:41**
SG/Math	
R spoke 1st time with sentence	

The record illustrates several things.

- Child is identified — RCG are initials. You know who that is and it is not necessary to write out a full name.
- Section is identified -- SG/Math refers to small group/math activity. Patterns of behavior may be tied to particular settings.
- Date and time are identified — patterns of behavior may be tied to particular days and times.
- The behavior is objectively stated — behavior should relate to program goals.
- The record is short and uses some form of shorthand. Remember, they are for planning instruction and should be meaningful to the teacher, not necessarily in perfect prose.

Checklists and Inventories. Teacher-made checklists and inventories are developed from objectives in each of the three domains. The example below is a checklist used to indicate potential problems in the affective domain.

Potential Problems
Affective Domain

Name _____

Age _____

Date of Record _____

Variability of Behavior	**YES**	**NO**
Attends school regularly unless sick	☐	☐
Plays and works well with others	☐	☐
Has made friends in school	☐	☐
Shares and takes turns	☐	☐
Practices self control	☐	☐
Defends wishes and opinion appropriately	☐	☐
Enjoys school and its activities	☐	☐
Displays self-control	☐	☐
Shows self-confidence	☐	☐
Earns worthwhile group approval	☐	☐
Respects property of others	☐	☐
Adjusts easily to new situations	☐	☐
Listens while others speak	☐	☐
Accepts responsibility	☐	☐
Work Habits		
Is observant, curious	☐	☐
Thinks for self and solves own problems	☐	☐
Observes rules and regulations	☐	☐
Follows directions	☐	☐
Has good attention span	☐	☐
Works neatly	☐	☐
Completes activities promptly	☐	☐
Works well independently	☐	☐
Seeks helps when necessary	☐	☐
Uses materials correctly	☐	☐
Takes care of materials	☐	☐
Cleans up after work period	☐	☐
Finishes what has been started	☐	☐
Expresses pride, values own work	☐	☐

Note Taking. Jotting down a few words or phrases is a useful way to record behavior during activities such as discussions, plays contrived incidents, role playing, interviews or conferences. Carrying a clip board or a few index cards is a convenient way to jot down notes.

Discussion	**12/5 9:45**
Post Office	
JP took turns better today.	
LR good contribution.	
BM not participating yet.	

The method used in this guide — listing objectives under the processes by subject areas — eases record keeping in typical grade books. Mastery of particular objectives can be indicated by recording the dates when behavior was observed.

To Whom and How to Report

Reporting to the child

Because it contributes to the learning process, the results of assessment should be communicated to the child as soon after completion of the activity as possible. Reporting on progress can be accomplished to some extent through the self-assessment techniques discussed above. However, there are activities which do not lend themselves to these. This is especially true when a question has more than one correct answer, when a creative product has been developed or when students need feedback other than that gained through self-assessment techniques. Reporting to the child could take the forms of individual or small group conferences and written or oral direct comments concerning progress toward present and future objectives.

Reporting to Other School Personnel

To maintain the continuum of development without gaps in knowledge and to ensure that learning occurs in sequence, it is imperative that there be a continuing record for each child. This record can be in the form of a folder in which the teacher places pertinent information. This should include, but not be limited to, information concerning the child's learning styles, the objectives taught and the child's progress toward achievement of the objectives, samples of the child's products, health information, socio-emotional information and family information such as parents' place of work, emergency telephone numbers, number and age of siblings. The folder is passed on to the child's next teacher who then has a basis for continuing the personalization of education for the child.

Record keeping provides the teacher with information to share with other school personnel such as a principal, school psychologist or counselor, Title I teacher, music teacher, art teacher, physical education teacher or aides as necessary.

Reporting to Parents

The teacher who keeps adequate records has solid information to deliver to parents. This helps both the parents and the teacher during the reporting process. Reporting to parents reflects the growth of children as related to the specific objectives of the instructional program. The following are sample report cards developed to reflect an integrated curriculum as described in this guide.

Report Card Sample

Name _____ **Teacher** _____

Grade _____ **Date** _____

_____

Objectives child has mastered

_____

_____

_____

_____

Objectives in which child has shown improvement. Child needs to continue working on these objectives.

_____

_____

_____

_____

_____

Objective in which your child needs help at home

_____

_____

_____

Suggested activities and materials to help at home

_____

_____

_____

Note: *This should be a two part form, one for the teacher and one for the parents. Form is stapled into folder.*

Attendance information and space for parent comments are on the outside of the folder.

Report Card Sample

Same form every quarter but a new copy each quarter. Use carbon paper if a copy is desired.

Student name _____ **Grade** ___ **Date** ___ **Quarter** ___

Teacher _____ **Present** ___ **Absent** ___ **Tardy** ___

Key: M = mastered **T = trying**
I = showing improvement **NT = not trying**
R = remains on the same level

Progress Report

Year-long Objectives

Language arts:

___ _____
___ _____
___ _____

Math:

___ _____
___ _____
___ _____

Science:

___ _____
___ _____
___ _____

Social studies:

___ _____
___ _____
___ _____

Foreign language:

___ _____
___ _____
___ _____

Music:

___ _____
___ _____
___ _____

Visual arts:

___ _____
___ _____
___ _____

P.E.:

___ _____
___ _____
___ _____

Ecology:

___ _____
___ _____
___ _____

___ Uses five senses
___ Uses manipulative movements (i.e., writing, cutting, drawing, hammering, stringing, etc.)
___ Uses skilled movements (i.e., catching, batting, gymnastics, etc.)
___ Uses creative movements (i.e., dance, gestures, facial expression, etc.)
___ Exhibits endurance
___ Exhibits strength
___ Exhibits agility
___ Developing a more positive self-concept
___ Accepts physical appearance and responsibility for personal care
___ Accepts role in family and with peers
___ Functions independently of family
___ Perceives self as accepted member of school and community
___ Works independently
___ Confident in ability to attempt new tasks
___ Sets realistic goals
___ Exhibits pride in accomplishments
___ Accepts role of group member
___ Accepts role of leader
___ Accepts and expresses own feelings
___ Accepts success and praise
___ Accepts failure and criticism

Other Comments:

(Items in the left column are the cognitive areas; the right column lists psychomotor and affective objectives.)

Report Card Sample

School name _____

Student name _____ **Grade** _____ **Date** _____

Teacher _____ **Days Present** ___ **Absent** ___ **Tardy** _____

KEY: M = mastered T = trying NT = not trying

Your child has worked on the following objectives this quarter

Cognitive Intellectual Skills		**Affective Social-Emotional Skills**		**Psychomotor Physical Movement Skills**	
Objectives	*Progress*	*Objectives*	*Progress*	*Objectives*	*Progress*
(The objectives written here are mimeographed)					

_____ has also worked on these personal objectives.

Objectives	*Progress*	*Objectives*	*Progress*	*Objectives*	*Progress*
(These are written in for each child each reporting period)					

Comments (parent or teacher)

Sample Permanent Record Form - Folder Format

Front of Folder - Identifying Information

Name _____ Birthdate _____ Sex _____

Address _____ Telephone _____

Father's Name _____ Occupation _____

Mother's Name _____ Occupation _____

any other applicable information

PROMOTION RECORD

Teacher _____ Year _____ Placement _____ Grade ____

_____ _____ _____ ____

_____ _____ _____ ____

Middle of Folder - Opened Flat

	X		1		2		3		4	
Teacher										
Grade level										
Days present										
Absent										
Tardy										
Year		School		School		School		School		School

COGNITIVE OBJECTIVES

Process-interpreting/analyzing

Language Arts

1. Identify objective
2. Identify objective

Mathematics

1. Identify objective
2. Identify objective

Each Process continue with content areas

Continue through AFFECTIVE OBJECTIVES PSYCHOMOTOR OBJECTIVES

How To Use Assessment Information

Teachers use the assessment information to plan a personalized program for each child, to provide cumulative information for a continuum of objectives in the three domains, and to receive feedback on units.

The use of a variety of assessment techniques enables the teacher to obtain a composite picture of each child's needs, learning style, abilities, aptitudes, interests, experiential background, health and progress. The teacher considers all this information when planning new objectives and activities for each child based on that child's uniqueness. This is what **personalizing** education means. It is imperative that the teacher continually assess children's progress in order to keep planning in step with development—otherwise, the educational program ceases to be personalized.

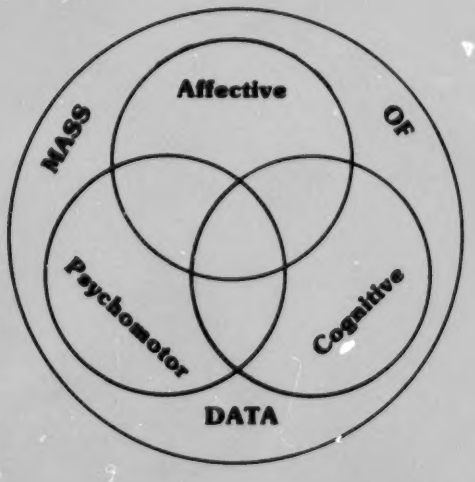
Maintaining continuity

Assessment and the records of assessment enable the teacher to ensure that the desired objectives have been introduced to each child, and to monitor the child's growth toward achievement of the objectives. The cumulative effect of the records ensures that continuity occurs in the introduction and achievement of objectives as the child progresses from one teacher to another. Because objectives selected for each age group build logically on previous experience, planning across grade levels is essential.

A continuous assessment program also gives the teacher feedback about the effectiveness of the unit. The teacher discovers which centers and activities are successful with which children, if additional materials and activities are needed, and if any adjustments need to be made. This information can be most helpful when planning future instructional units.

In assessing the child across the three domains, the teacher accumulates a mass of data that must be organized in planning a personalized integrated program. Figure three illustrates this integration of data from the three domains.

Figure Three



The flow of this data through the components of the assessment process is summarized for the reader in Table 16.

Table 16
Components of the Assessment Process

I. What is assessed in all three domains?	II. Why use assessment?
Objectives Learning Styles Special Needs	Maintain Continuity Personalize Planning Receive Feedback
III. Who participates in assessment?	**IV. How to assess.**
Teacher	Observation Teacher-child conferences Interviews or discussions Work samples Role playing Essays Projects, contracts, Reports Directed questioning Purposefully made mistakes Ambiguous pictures Open-ended stories and sentences Rating scales Questionnaires Sociograms Screening instruments Norm-referenced tests Criterion-referenced tests
Child	Evaluation of individual or group Self-checking devices
Parents	Interviews and conferences Questionnaires Observation and visits Letters and notes Informal conversations
Community	Services of medical agencies Day care services Assessment and development of units of work
Other School Personnel	Checklists and questionnaires Anecdotal records Work samples Conferences Reports Psychometric and other specialized evaluations
V. Who receives a report?	**VI. How to report.**
Teachers	Checklists and charts of objectives and processes Anecdotal records Class records
Parents	Conferences Report cards Letters and notes Home visits Homework (completed and uncompleted) School work (completed and uncompleted)
Children	Conferences Interviews Informal conservations Grades on work completed Report cards
Other School Personnel	Permanent records Ongoing records Conferences Staffings

Sample Learning Styles Checklist for Teacher Use

	Names											
THE CHILD WORKS OR LEARNS . . .												
with new materials or situations.												
with familiar materials or situations.												
impulsively.												
reflectively.												
with visual materials.												
with auditory materials.												
independently.												
in groups.												
in morning or midday.												
in afternoon or evening.												
in child-selected tasks.												
in teacher-selected tasks.												
with little pressure.												
with much pressure.												
with little praise.												
with much praise.												
in conventional ways.												
in unconventional ways.												
in quiet room.												
in noisy room.												
in gross motor activities.												
in fine motor activities.												
in short term study periods.												
in one long term study period.												
with a sense of humor.												
with sensitivity and responsiveness to animals, people and inanimate objects.												
with flexibility in the range and number of adaptive shifts.												
confident of some control over experience.												

Additional Sample Checklist

Key

√ = accomplished well
P = progressing, continue practice
R = needs remediation
I = introduced
LG = large group
SG = small group
C = center
O = one on one

Process	**Objectives**							
Observing/ Selecting/ Identifying	Demonstrate ability to identify collection of objects by sets		Describe a variety of textures		Tell time by using a clock			
Names	**Rating**	**Remarks**	**Rating**	**Remarks**	**Rating**	**Remarks**	**Rating**	**Remarks**
Laurie S.		I 10/1 C	P	I 10/4 mixed up hard & rough SG	R	I 10/7 wait until Dec. SG		
Becky W.	P	I 10/10 ask mother to help her C	R	I 10/4 limited vocabulary O				
Kyle B.	10/1	I 10/1 C	10/4	I 10/4 SG	P	I 10/15 knows hours SG		

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Sample Psychomotor Checklist for Teacher Use

Key

√	=	**good**
P	=	**needs practice**
X	=	**too difficult**
LG	=	**large group**
SG	=	**small group**
I	=	**individually**
C	=	**center**

Names

Psychomotor Domain ***Process: Key Concepts***	**Eric G.**	**William F.**	**Ben B.**							
Movement Abilities ***Locomotor***	11 11	11 12	11 14							
running	LG	LG	LG							
jumping										
hopping		P	X							
skipping		P	X							
climbing		P	P							
Nonlocomotor balancing on one foot	LG	LG	LG							
stretching										
bending										
swaying			P							
pushing										
twisting	P	P	P							
Manipulative										
stringing beads	C	C	C							
drawing 0 + □	SG	SG	I							
hammering	C	C P	C P							
cutting	C	C	I P							
writing	C	SG	C P							
Skilled Movement										
jump rope unassisted	C	I	C							
cart wheel	LG I	LG SG P	LG							

Program Evaluation Checklist
Assessment

		Yes	No	Comments
1.	***Continuous student assessment is conducted***			
	A. For all domains of the child (affective, psychomotor, cognitive)	☐	☐	
	B. By using a variety of procedures for each child.	☐	☐	
	C. With established time to assess each child.	☐	☐	
2.	***Involvement in the assessment process includes***			
	A. Children	☐	☐	
	B. Parents	☐	☐	
	C. Community	☐	☐	
	D. School personnel	☐	☐	
3.	***In the classroom the following are being assessed***			
	A. Child growth as related to progress of curriculum objectives.	☐	☐	
	B. Individual learning styles.	☐	☐	
	C. Special needs of each child.	☐	☐	
4.	***The teacher assesses student progress through the use of***			
	A. informal, teacher-developed techniques.			
	1. Observation	☐	☐	
	2. Teacher-child conference (interviews, discussions)	☐	☐	
	3. Work samples	☐	☐	
	4. Role playing	☐	☐	
	5. Essays	☐	☐	
	6. Projects, contracts, reports	☐	☐	
	7. Directed questioning	☐	☐	
	8. Purposefully made mistakes	☐	☐	

		Yes	No	Comments
	9. Open-ended stories and sentences	☐	☐	
	10. Children's evaluations	☐	☐	
	11. Rating scales	☐	☐	
	12. Questionnaires	☐	☐	
	13. Sociograms	☐	☐	
	14. Work records	☐	☐	
B.	formal, standardized assessment techniques.			
	1. Commercial program	☐	☐	
	2. Norm referenced	☐	☐	
	3. Criterion referenced	☐	☐	
	4. State developed	☐	☐	
5.	***The teacher is aware that test taking skills can help children***			
A.	perform to the best of their ability.	☐	☐	
B.	by allowing them to learn to relax during tests through unpressured practice test sessions.	☐	☐	
C.	by providing familiarity with test terminology.	☐	☐	
6.	***Assessment data is recorded***			
A.	in a systematic manner.	☐	☐	
B.	in anecdotal records.	☐	☐	
C.	on checklists and inventories.	☐	☐	
7.	***Assessment information is reported to***			
A.	the child.	☐	☐	
B.	parents.	☐	☐	
C.	school personnel.	☐	☐	
8.	***Assessment results are used to***			
A.	personalize instruction.	☐	☐	
B.	maintain continuity.	☐	☐	
C.	receive feedback on instruction.	☐	☐	

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Chapter Six

Personalizing The Home-School Partnership

I dreamed I stood in a studio and watched two sculptors there. The clay they used was a young child's mind and they fashioned it with care. One was a teacher; the tools he used were books, music, and art. One was a parent, who worked with a guiding hand and a gentle loving heart. Day after day the teacher toiled with a touch that was deft and sure; while the parent labored by his side and polished and smoothed it o'er. And when at last their task was done they were proud of what they had wrought. For the things they had molded into the child could neither be sold or bought. And each agreed that he would have failed if he had worked alone. For behind the teacher stood the school and behind the parent, the home.

C. Swarat

Why Personalize the Home-School Partnership?

The parent is the child's primary and most significant teacher. It is essential that teachers and parents work together to form a partnership that will foster the growth and development of the total child.

Parents want to know what they can do to help children at home. Teachers want information that can help them provide children with a needed support system and improve educational experiences.

Parent Involvement is Important to Child Success in School

Children whose parents are directly involved in their education tend to achieve more in school. The attitudes of parents toward school have a tremendous impact on the attitudes of children. As school personnel reach out to parents to encourage their active participation, a more effective education will be provided for children. Because this has been substantiated by numerous studies (Gordon, 1970; Biber, 1970; Bronfenbrenner, 1974), educators must not only recognize this important fact, but also must actively incorporate this information into their daily teaching functions. The following suggestions include practical means for communicating with parents and involving them in their child's experience.

Communicating Effectively with Parents

Person-to-person and day-to-day communication and interaction are important in establishing positive relationships with parents and members of the community. Although parent organizations are helpful in bringing teachers and parents together on a monthly or bimonthly basis, regular communication between parents and teachers is a vital key to an effective home-school partnership.

Only the teacher's creative efforts will determine the number of ways to communicate with parents. It is important that a variety be used to accommodate the busy schedules of both parent and teacher. The following suggestions have worked for many teachers.

Parent-Teacher Conferences

A desirable parent-teacher relationship means that the participants are partners in planning for and working with the child. Teachers and parents need to share their experiences with the child to gain essential information for planning educational experiences. The following guidelines for parent-teacher conferences can enhance the parent-teacher relationship.

- Plan the conference location where there will be no interruption.
- Prepare for the conference. Organize an agenda and materials prior to the conference. Have records and samples of the child's work available to share with parents.
- Create a relaxed and happy atmosphere. Remember that the parent may be as nervous and apprehensive about the conference as you are.
- Open the conference with positive comments about the child. Discuss the child's needs in relation to achievements and capabilities.
- Present problems tactfully. Be honest but encouraging in your reports to the parents.
- Encourage parents to work out possible ways of meeting problems. Think in terms of how "we"—you and the parents—can work together at all times.
- When assisting the parents with solutions to problems, offer several alternatives.
- Communicate regularly with parents. Don't schedule conferences for problems only. Parents need to know when things are going well in addition to knowing when problems arise. In fact, ongoing communication can keep many problems from developing. Encourage parents to contact you if they need information or assistance concerning their child (see discussions of telephone communication and informal visits.)

- A teacher shouldn't be afraid to say, "I don't know." He or she can offer to obtain more information, then follow up with another conference or other means of communication.
- Keep a record of information obtained for future reference.
- Remember, education terms should be explained during the conference to help bridge the home-school communication gap. Many people find this language pretentious and obnoxious. Avoid using it when possible.

Newsletters

Newsletters are a positive and personal approach in communicating with parents, especially when children are involved in writing, editing and distributing. Newsletters may include the following.

- Summary of the week
- Exciting classroom or school events
- Educational tips
- Invitations to parents to attend classroom or school functions
- Invitations to parents to volunteer their ideas, talents and time for various school needs
- Activities in which parents may participate at home with their children, to enrich the learning processes
- Community resources.

Telephone Communication

Telephone communication is an essential tool for communicating the educational process to parent and home. It helps bridge the gap when a parent is unable to visit the school or attend a scheduled conference. Brief phone calls can provide immediate information to parents, may reinforce the child's progress, clarify misconceptions or be used to obtain a daily report concerning an absent or ill child. The telephone is a resource that breaks barriers between home and school.

Group Meetings

Periodically, parents may be invited for group meetings to learn about the school program as well as to meet each other, the teacher and other faculty members. A meeting scheduled at the beginning of the year might promote a unified partnership between the school and the parent group. Partners may be informed of the goals and objectives and the total curriculum in the school or classroom. Question and answer sessions are beneficial in promoting group discussions and are usually effective at the end of the program.

Progress Reports

Progress reports are essential as an ongoing evaluation of the child. Because it is important for the parents to be aware of the child's progress throughout the year, those reports must accurately reflect the growth of the individual as related to the educational objectives. Some progress reports which may be used in reporting to parents include these.

- Recorded teacher observation
- Checklists of cognitive, psychomotor and affective development
- Report cards
- Standardized test results

All of these reporting forms are discussed in detail in chapter seven of this guide. In reporting to parents, it is important to communicate the teacher's objectives for the child's growth as related to these progress reports. This will assist the parents in gaining specific information concerning the relationship between what is being assessed and the level of reported growth.

Short Notes **(examples of notes home to parents)**

General notes - quick and simple ditto machine form
"Alice had a terrific day."
"Bentley was a whiz on the spelling quiz."
"Lewis won the Outstanding Worker of the Day Award."

Notes addressing specific problems — personal handwritten notes
"Kim, thanks for trying so hard today." (note to student)
"What a fine job Robert did in reading today." (note to parent)

Performance Feedback
"Erica received 100 on SRA today. Terrific!"
"Britt wrote a great story today!"
"High Points of the Week"
Relating — Remarkable thinking during science discussion
Math — Completed all work
Analysis — Accurate thinking while reviewing story read
Social Studies — Attends and follows directions carefully. Cooperates with other students in class project
Other — Improving on all work habits

Informal Visits

Spontaneous visits by parents may offer another opportunity for communication between home and school. Informal visits with the teacher should be encouraged when a parent brings a child to school. This, of course, necessitates planning to allow the teacher time to accommodate such visits before and after school. Through the spontaneity of informal visits, parent, child and teacher may build a relationship around unified interests and needs.

Home Visits

Visits to the child's home by the teacher is considered one of the best methods for communicating with parents.

By understanding the home and total environment of the child, the teacher may establish a closer working relationship with the child and parent or parents to better meet each child's needs. In order to assure that a home visit is acceptable to both parents and teacher, parents should be informed prior to any visit. *Teachers have established the role of initiating this style of visit. Therefore, few parents may take a first step toward this type of involvement. The teacher needs to lead the way.*

Involvement of Working Parents

The economy and the shifting of lifestyles for the American family has in many instances involved both mother and father in a full-time occupation outside the home. These working families and their needs should be given special consideration in planning for home school communication. It is our job as professionals to be creative in making it possible to work with each parent regardless of individual circumstance. Here are some suggestions for involving parents.

- Share their work experience in a classroom presentation or arrange or conduct a field trip
- Volunteer to help on days off from work
- Donate materials to child's school which relate to specific program needs
- Assist the teacher with preparation of educational materials
- Make phone calls to give general information about school events or school needs to other parents; maintain close contact with the child's school, teacher and friends
- Assist in providing an early breakfast for teachers and working parents

Parents as Teaching Partners

The time required to develop a home-school partnership will vary. Speed is not the goal. The goal is the creation of a positive, two-way information dissemination network between home and school. That network will enhance the growth and development of individual children and foster positive attitudes among teachers and parents.

Parents in the home

Most parents are eager to be involved in their child's education and teachers should use them as resource persons as much as possible. Below is a list of practical ideas to involve parents.

- A read-at-home program designed to meet individual needs of children is one of the easiest ways to involve parents. A book-a-week may be sent home for the parent to read to the child, or the child may read to the parent.
- Teacher-made learning games may be sent home to provide parent-child interaction and growth in basic skills. These games may be prepared by students teachers or aides. Games are excellent tools for introducing and reinforcing concepts.
- Teachers may provide specific instructions to aid parents in tutoring children at home. Don't send home a note asking a parent to help his or her child with the alphabet. It is far better to identify specific activities using resources available around the house.
- Send home a list of easy-to-make learning games. Suggest how parents can use these games at home.
- Help parents use everyday activities in and around the home as learning opportunities for their children. Here are some examples.

1. Parents may be given ideas about how to turn a shopping trip to the grocer's into a learning activity for children. Older children can add up purchases and younger children can count out quantities. Encourage parents to talk about the color and size of fruits and vegetables and about the names of the different kinds of produce. Children can also help make the shopping list.
2. Encourage children to ask questions about and discuss happenings around them. (Why do I need to lock the door? Why do leaves change colors? Why is Mr. Bush so grumpy today?)
3. Young children can help with the laundry by matching socks, folding flat pieces and sorting clothes. The opportunities for learning are numerous.
4. Setting the table offers a variety of opportunities for children to learn one-to-one matching and to develop small and large muscle coordination.
5. Children may be taught to help with household chores such as cleaning their room, washing dishes, or preparing food for cooking. Some parents may not be aware of the need to "teach," "model" and "supervise" these learning experiences. Parents may share with each other what has worked with their children.
6. Cooking activities provide invaluable learning experiences for children. These experiences give parent and child opportunities to interact by planning and discussing menus.
   These experiences may help children learn responsibilities and desirable health and safety habits. Cooking experiences may also provide a basis for learning to think and make judgments as well as encourage the use of reading and math skills. *A Child's Cookbook*, by Bev Veitch, is an excellent recipe book for children. It presents pictorial single-portion recipes that may easily be prepared at home.
7. How about a walking tour of the neighborhood? Children of all age levels benefit from this activity. Children can make a map of the area or draw the things they observed and dictate a story to a parent or an older sibling.

- In *Workjobs for Parents* (Lorton, 1975) the author has put together a selection of activities for parents to make and use at home with their children. The activities are manipulative and are designed to help children develop language and number skills.

- Many language development activities may be done in the home. For example, in Van Allen's book, *Language Experiences in Early Childhood*, pupil-parent leaflets are provided as a reinforcement of the classroom language program. Other resources are included in the bibliography.

- Many materials are available to help parents enhance their child's self-concept and awareness of others. Teachers can provide parents with a list of books on a variety of topics. The following is a sample.

  Between Parent and Child, by Haim Ginott, 1969.
  Your Child's Self-Esteem, by Dorothy C. Briggs, 1970.
  Helping Your Child Develop His Potentialities, Ruth Strang, 1965.
  Peoplemaking (because you want to be a better parent), Virginia Satir, 1972.
  The Child Under Six, by James L. Hymes, 1971.
  Good Schools for Young Children, by Sara Leeper, 1968.
  Primer for Parents of Preschoolers, by Edith Neissen, 1972.
  100 Ways to Enhance Self-Concept, by Harold Canfield and Jack Wells, 1976.

- There are many materials available for parents of handicapped children. Teachers should make every effort to involve these parents in their child's educational development. The *Exceptional Parent* magazine provides specific information to help parents of exceptional children. The journals *Teaching Exceptional Children* and *Children Today* often provide useful program ideas for working with parents of handicapped children. Many resource materials for parents may also be obtained from the Department of Education or the Department of Human Resources.

- Teachers should encourage parents to use the community library to get books for their children. Parents should also be aware of other services that might be available at the library such as films, puppet shows, records and toy lending.

- Encourage parents to use resources in the community--take children to museums, art galleries, the zoo, recreational facilities, planetariums. Children should be provided with many opportunities to experience the world in a meaningful way.

Parents in the Classroom

Parents' participation in the classroom may significantly help the instructional program. An important point to remember is that parent volunteers must experience both long- and short-term planning and training in order to feel comfortable in the classroom. They need to know where they are going, what they may expect, what they may contribute and for what they are responsible.

The success of a parent volunteer program will depend on time allotted for planning with the parents. If time is not built in during the school day, teachers should arrange to meet with volunteers before or after school. Find out from parents what talents and resources they have that can be used in the classroom. Explain the how and why of activities parents will be doing with children and discuss the importance of their roles as parent educators. (A sample letter and checklist which will be useful in recruiting volunteers are included at the end of this chapter.

Parent volunteers should have many opportunities to see the teacher model desirable teaching. Parents must feel comfortable and confident before being placed in teaching situations with children. *The teacher should assess and match the level of each parent's skill to the assigned task. The range of entering skill will usually be large. Once the parent and teacher have identified the specific task that matches the parent's skill level, training sessions to help the parent perform this task effectively can be devised. Such training sessions should be brief and convenient. Specify the behavior required for each task the teacher wants parents to supervise. Once outlined, techniques such as demonstration, role play and discussion can be used to help parents acquire these. (Kindergarten in Georgia)* Below is a list of sample activities for using the services of parent volunteers. They present a wide range of possibilities.

Instructional

Tutor individuals requiring remedial work
Work with children in centers
Do cooking, art, music activities with children
Lead small group discussions with children
Read stories to children, listen to children read
Assist children with independent activities
Serve as resource person in area of expertise
Assist children with creative writing activities
Develop language experience stories with children
Make books and learning games for classroom
Organize classroom library with children

Clerical

Grade papers
Keep records
Take attendance
File children's work
Develop newsletter for parents and community members
Laminate materials
Collect milk money, breakfast and lunch money, money for trips

Other

Plan bulletin boards with children
Operate audiovisual materials
Assist during school registration
Recruit and train other parents to serve as volunteers
Supervise after-school clubs
Monitor cafeteria and playground
Assist teacher on field trips
Organize parents for special projects and social activities
Serve as liaison between community and school. Volunteers may visit parents to discuss the school program and offer suggestions for working with their children at home

Set up and coordinate a toy lending library or a parent workroom
Make playground equipment
Repair damaged materials (toys, books)
Design and use puppets in storytelling

The importance of recognition of volunteers must not be overlooked. Teachers and principals should plan formal or informal recognition programs for volunteers. These may include

- Letters of appreciation from teachers and principals
- Presentation of awards or certificates
- A volunteer luncheon or tea
- Thank you notes from children

Working Parents Find Quality Care for Preschoolers

Choosing a Quality Day Care Program

Quality child care centers are essential to our communities today. With fathers and mothers both working, we are increasingly dependent on child care center programs to provide for the developmental needs of children in addition to replacing the nature of a home environment. Quality day care programs not only provide excellent custodial care for children (i.e., clean environment, nutritious food, adequate balance of rest and activity), they provide a rich stimulating educational environment which provides a bridge to the formal school program beginning in kindergarten. Centers should maintain a stable substitute for the family relationship, which is the most significant developmental influence in the young child's life. Parents need to know how they can judge the quality of day care programs. Some of the features parents need to look for are these.

- Adequate amounts of time spent by caretakers in one-to-one relationships with children, creating a feeling of security and trust.
- Provision for scheduled daily activities which provide opportunities for intellectual growth.
- Provision for a variety of materials that will encourage children's physical, social, emotional and mental growth.
- An emotionally satisfying climate that is challenging and positive.
- Adequate hygiene and nutrition programs.
- Nonhazardous play areas inside and outside equipped with safe, child-sized equipment and with adults present at all times.
- A licensed facility.

Establishing Educational Continuity Between Day Care Centers and Public Schools

In some communities, children leave the regular school at the close of the day and go to an extended day program for the remainder of the day. These extended day centers provide care for children until they are picked up by their parents. The centers can be linked to schools by providing continuity of services to children. To bridge the gap between center and school, teachers should familiarize center staff with the school's total curriculum so that ongoing educational experiences for children are maintained.

Preschool programs such as Headstart and parent child centers provide comprehensive health, education and social work services for families with preschool children. These programs emphasize early child development and active parent involvement and should become an integral part of the public school early childhood program. Teachers may facilitate program continuity between day care centers and public schools by maintaining ongoing communication with the program personnel and with the families of the children. Cooperative collaboration between the child care facility and the school can enhance the growth and development of children, foster the role of parents as active educators and help the two organizations understand each other's functioning.

The Role of the Administrator in Parent Involvement

This chapter has focused on the classroom teacher's role in working with parents. Certainly this role is central, but the classroom teacher does not have total responsibility for these activities. If a parent involvement program is to be effective, it cannot be confined to one classroom or to one grade in the school. If the principal supports the teachers' efforts, much more can be achieved; a coordinated, continuous, more diversified parent involvement program can be constructed. Other auxiliary personnel in the school may be wise to devote part of their time to this effort. Elementary school counselors, social workers, school psychologists, nurses, communication specialists and librarians have skill and training needed in an effective, diversified and coordinated program.

*Parent Recruitment Letter**

Dear Parents,

Boys and girls are our most important resources. We share a common purpose—educating children. Many children need individualized attention. You have experience which can help our children grow. You can help many of our children in school. We need volunteers to help the teacher in ways which will allow him or her to provide more help to our children.

If you are interested in serving as a volunteer, we will be delighted to hear from you.

We have attached a list of activities which may be carried out by volunteers. If you have a special ability or interest which has not been listed, please insert it on the bottom of the sheet.

You are invited to a brief meeting to discuss the volunteer program in more detail.

Date:

Time:

Place:

Sincerely yours,

Principal-
Teacher-

* From *Volunteers in Education: A Handbook for Coordinators of Volunteer Programs*. Recruitment Leadership Training Institute, Temple University, Philadelphia.

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*Sample Checklist to Accompany Recruitment Letter**

I would like to
(check all that apply)

_____ **Assist in the classroom.**

_____ **Work with small groups of children.**

_____ **Work with an individual child**

_____ **Work in the library**

_____ **Make posters and displays**

_____ **Help with clerical duties**

_____ **Prepare instructional materials**

_____ **Act as a resource person in** _____

_____ **Speak to class on my specialty, which is** _____

_____ **Help on the playground.**

_____ **Other interest (please specify)** _____

_____ _____ _____

NAME **ADDRESS** **PHONE**

Day or days I can help

Mon. _____ **Tues.** _____ **Wed.** _____ **Thurs.** _____ **Fri.** _____

Hours I can help **At home** _____ **At school** _____ **Other** _____

* From *Volunteers in Education: A Handbook for Coordinators of Volunteer Programs.*

Program Evaluation Checklist
Personalizing the Home-school Partnership

		Yes	No	Comments
1.	***The teacher communicates effectively with parents through the following.***			
	A. Parent-teacher conferences	☐	☐	
	B. Newsletters	☐	☐	
	C Telephone communication	☐	☐	
	D. Group meetings	☐	☐	
	E. Progress reports	☐	☐	
	F. Short notes	☐	☐	
	G. Informal visits	☐	☐	
	H. Home visits	☐	☐	
	I. Involvement of working parents	☐	☐	
2.	***Parents as teaching partners***			
	A. visit in the classroom	☐	☐	
	B. work in the classroom as volunteers	☐	☐	
	C. assist in recruiting other parents	☐	☐	
	D. reinforce learning activities at home that support skills the child is developing	☐	☐	
3.	***Meetings and workshops are held with parents to help them interact more effectively with their children at home.***	☐	☐	
4.	***Parents help to plan***			
	A. activities which involve them	☐	☐	
	B. program development	☐	☐	
	C. evaluation	☐	☐	
5.	***Parents are used as resources and in activities which use their talents.***	☐	☐	
6.	***Parents are provided clearly stated instructions for activities at home.***	☐	☐	
7.	***A variety of educational materials which will enhance parent knowledge of child development is made available.***	☐	☐	

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For additional resources, see *Kindergarten in Georgia*. Atlanta: Georgia Department of Education, 1979.

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Chapter Seven

Personalizing Professional Growth

Teachers will become models of humans relating to humans, not merely persons skilled in a content field.
Benjamin Bloom

Personalizing Professional Growth

Because learning is a lifelong process and teachers play an important part in the education of children, continuing teacher education must be a paramount concern and activity of the teacher. The following discussion highlights basic skills and competencies that should be high priority objectives for teacher growth.

Effective Teaching

Successful personalized teaching requires competence in interpersonal communications, planning and instructional techniques as well as knowledge of content areas and child development. Some of these competencies are listed in the *Teacher Performance Assessment Instrument* (TPAI) (1979) for Georgia teachers. This instrument is designed to determine how well beginning teachers can demonstrate selected general competencies which members of the teaching profession have declared as essential to effective professional performance. Teaching competencies are identified within three categories — classroom procedures, interpersonal skills, professional standards. These competencies are presented in Tables 17, 18 and 19.

Table 17
Classroom Procedures Identified in the Georgia TPAI

Uses Instructional Techniques, Methods and Media Related to Objectives.

1. Uses teaching methods appropriate to objectives, learners and environment.
2. Uses instructional equipment and other aids.
3. Uses instructional materials that provide learners with appropriate practice on objectives.

Communicates with Learners.

4. Gives directions and explanations related to lesson content.
5. Clarifies directions and explanations when learners misunderstand lesson content.
6. Uses responses and questions from learners in teaching.
7. Provides feedback to learners throughout the lesson.
8. Uses acceptable written and oral expression with learners.

Demonstrates a Repertoire of Teaching Methods.

9. Presents learning activities in a logical sequence.
10. Demonstrates ability to conduct lessons using a variety of teaching methods.
11. Demonstrates ability to work with individuals, small groups and large groups.

Reinforces and Encourages Learner Involvement in Instruction.

12. Uses procedures which get learners initially involved in lessons.
13. Provides learners with opportunities for participation.
14. Maintains learner involvement in lessons.
15. Reinforces and encourages the efforts of learners to maintain involvement.

Demonstrates an Understanding of the School Subject Being Taught.

16. Helps learners recognize the purpose and importance of topics or activities.
17. Demonstrates knowledge in the subject area.

Organizes Time, Space, Materials and Equipment for Instruction.

18. Attends to routine tasks.
19. Uses instructional time effectively.
20. Provides a learning environment that is attractive and orderly.

Table 18
Interpersonal Skills Presented in the Georgia TPAI

Demonstrates Enthusiasm for Teaching and Learning and the Subject Being Taught

1. Communicates personal enthusiasm.
2. Stimulates learner interest.
3. Conveys the impression of knowing what to do and how to do it.

Helps Learners Develop Positive Self-concepts

4. Demonstrates warmth and friendliness.
5. Demonstrates sensitivity to the needs and feelings of learners.
6. Demonstrates patience empathy and understanding.

Manages Classroom Interactions

7. Provides feedback to learners about their behavior.
8. Promotes comfortable relationships.
9. Maintains appropriate classroom behavior.
10. Deals with disruptive behavior among learners.

Table 19
Professional Standards Presented in the Georgia TPAI

Meets Professional Responsibilities

1. Works cooperatively with colleagues, administrators and community members.
2. Follows the policies and procedures of the school district.
3. Demonstrates ethical behavior.
4. Performs extra-instructional duties

Engages in Professional Self-development

5. Participates in professional growth activities.
6. Shares and seeks professional materials and ideas.

The Teacher Role in Developing In-service Opportunities

It is becoming increasingly important that a teacher have input in developing strategies for personal professional growth. Because today's emphasis is on personalizing education, it is necessary to be aware of one's needs in order to identify worthwhile professional activities. The teacher is in a better position than anyone else to know needs for professional development. Thus, the teacher should be responsible for developing a professional growth plan.

Fundamentally, there are two types of professional growth strategies. One is designated specifically for the individual, based on classroom needs. The other is based on general inservice needs. Since providing a personalized education for each student through an integrated curriculum is a teacher's ultimate goal, a personalized growth plan should be developed to provide for the student's or classroom needs along with the teacher's general in-service needs. To personalize in-service, teachers should make use of a variety of strategies for teacher growth. The following discussion briefly describes some of these strategies.

Participation in the development and use of teacher performance checklists, questionnaires and surveys may contribute to a teacher's performance. Results of these inquiries may also be used to identify topics of in-service development. The checklists located at the end of each chapter in this guide are intended to provide a model for the development of personalized teacher assessment checklists.

Group planning is effective. Because of the variety of resources and experience represented by a group of teachers, a group planning approach can often identify a wider range of resources to use for in-service sessions. Concerns and goals common to members of the group can be identified as well as the needs of individuals or smaller groups of teachers.

Experimenting with new ideas for classroom practice is a must in order to adapt these ideas to both personal teacher preferences and student needs. Experimenting includes putting to use new practices, evaluating their usefulness and adapting techniques to suit teaching styles. An evaluation of new practices is absolutely necessary in determining needs for further development, refinement or deletion.

Suggestions for a Personal Needs Assessment

Suggestions for a personal assessment include the following steps.

1. Respond to one of the program checklists.
2. Respond to the following questions.
   - What am I doing now that I do really well and should continue?
   - What am I doing now that I do pretty well, even though further refinements are necessary to assure desired results?
   - What am I doing now that should be stopped?
   - What am I doing now that needs immediate attention?
3. From responses to the above questions, establish and define personal goals.
4. After the goals that have been defined, rank these goals in order of priority.
5. Develop performance objectives from stated goals.
6. Evaluate performance.
7. Review goals and objectives periodically and rerank according to priorities.

Resources for Professional Growth

Personalization implies that in-service education will enable each teacher to acquire or to strengthen personal competencies. In-service resources assist teachers to renew or upgrade certificates and to meet personal goals for professional growth. Among the resources available are the following.

In-service programs. Workshops, conferences and conventions sponsored by local school districts address changing curriculum trends and issues, as well as instructional methods for professional development.

University courses. These are made available to students through evening classes, correspondence courses, extension courses, summer schools and study tours in other countries. See Appendix A for a list of Georgia colleges and universities offering courses and degrees in early childhood education.

Local teacher centers. Usually provide, at least, a work room for making new materials and encourage the exchanging of ideas among teachers. More complex centers are developed with a work room, conference or small group discussion room, refreshment center and a lecture or large group room. See Appendix A for a listing of sponsored teacher centers in Georgia.

Meetings of professional organizations. These organizations are instrumental in addressing local, state and national issues which influence the content and design of school programs. See Appendix A for a list of professional organizations.

Professional committees. Develop specific school policy and curriculum—e.g., philosophy and objectives, selection of materials, revision of curriculum guide.

Parent-teacher or faculty study groups. Formed to study specific areas of concern such as school discipline problems, open classroom vs. self-contained classrooms, improving math instruction. Findings may determine specific needs for staff development.

Visits to other classrooms and other schools. Provides the teacher with new ideas for classroom organization and instruction.

Informal teacher communication. Perhaps the most effective way to share new ideas and resources.

Independent reading of professional literature. Periodicals, books, pamphlets and films can be instrumental in personalizing professional growth.

Action research at the local level. Can be both educational and helpful in supporting or challenging suggestions for change in classroom practices.

State public library services. Will loan books and reference materials to teachers upon request through the local school media center. See Appendix A for addresses.

State film libraries. Provide a film subscription service upon request through the school media center. See Appendix A for addresses.

The Administrator's Role in Personalizing Professional Growth

This role in personalizing professional growth is largely that of an expeditor. He/she is in a position to facilitate professional development in the following ways.

- Provide time and place for teachers and other groups to meet.
- Arrange teachers' schedules so that they have time to plan together.
- Provide opportunities for teachers and teacher assistants to attend training meetings together.
- Invite outside groups to participate in studies.
- Arrange people in groups who work well together and who are knowledgeable about the area of curriculum that they are developing.
- Set up staff development programs, special workshops and study groups.
- Make arrangements for teachers to attend conferences, conventions and the like.

- Keep up to date on educational ideas by continuing education, independent reading, attending conferences and conventions.
- Make sure various curriculum activities are coordinated.

Basically, the role of administrator is to make arrangements and provide inspirational leadership in developing professional growth.

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Program Evaluation Checklist
Professional Growth

		Yes	No	Comments
The teacher				
1.	*Has defined professional growth goals.*	☐	☐	
2.	*Has developed or is developing a personalized professional growth plan.*	☐	☐	
3.	*Is aware of competencies listed in the Teacher Performance Assessment Instrument.*	☐	☐	
4.	*Can identify personal professional needs.*	☐	☐	
5.	*Communicates with other teachers within the school and system.*	☐	☐	
6.	*Communicates needs and problems to administrators who may have the power to make changes related to teacher needs.*	☐	☐	
7.	*Is familiar with in-service programs in the local school district.*	☐	☐	
8.	*Voluntarily takes part in in-service activities.*	☐	☐	
9.	*Is familiar with colleges and universities nearby that offer early childhood courses.*	☐	☐	
10.	*Is a member of one or more professional organizations.*	☐	☐	
11.	*Attends meetings of professional organizations.*	☐	☐	
12.	*Participates in work-study groups.*	☐	☐	
13.	*Serves on professional committees.*	☐	☐	
14.	*Visits other classrooms and schools frequently.*	☐	☐	
15.	*Reads professional literature.*	☐	☐	
16.	*Does action research in the classroom.*	☐	☐	
17.	*Makes use of reference and loan libraries.*	☐	☐	
18.	*Supplements teaching with audiovisual materials.*	☐	☐	
19.	*Knows certification requirements.*	☐	☐	

		Yes	No	Comments
The Administrator				
20.	*Maintains open communication.*	☐	☐	
21.	*Identifies staff development needs.*	☐	☐	
22.	*Coordinates and plans for staff development.*	☐	☐	
23.	*Provides teachers with time for professional growth.*	☐	☐	
24.	*Takes a leadership role in improving instructional practices.*	☐	☐	
25.	*Demonstrates knowledge of the early childhood program.*	☐	☐	
26.	*Provides time for teacher to plan daily.*	☐	☐	
27.	*Involves teachers in planning and developing curriculum.*	☐	☐	
28.	*Coordinates curriculum activities.*	☐	☐	
29.	*Encourages parent involvement.*	☐	☐	
30.	*Is aware of individual teacher's needs.*	☐	☐	
31.	*Maintains appropriate confidences.*	☐	☐	

Appendix A

Resources

Georgia Colleges and Universities Offering Degrees in Early Childhood Education

Albany State College
Albany 31705

Armstrong State College
Savannah 31405

Atlanta University
Atlanta 30315

Augusta College
Augusta 30902

Berry College
Rome 30161

Brenau College
Gainesville 30501

Clark College
Atlanta 30314

Columbus College
Columbus 30901

Emory University
Atlanta 30322

Fort Valley State College
Ft. Valley 31030

Georgia College
Milledgeville 31061

Georgia Southern College
Statesboro 30458

Georgia Southwestern College
Americus 31709

Georgia State University
Atlanta 30303

LaGrange University
LaGrange 30240

Mercer University
Macon 31204
Atlanta 30341

Morris Brown College
Atlanta 30315

North Georgia College
Dahlonega 30533

Oglethorpe University
Atlanta 30328

Spelman College
Atlanta 30331

Tift College
Forsyth 31029

University of Georgia
Athens 30601

Valdosta State College
Valdosta 31698

Wesleyan College
Macon 31201

West Georgia College
Carrollton 30117

Early Childhood Education Regional Services

Services

The early childhood staff of the Georgia Department of Education provides the following services to school systems and classroom teachers.

- **Staff leadership services to establish and expand the state supported kindergarten program**
- **Technical assistance in selecting appropriate materials and in writing curricula**
- **In-service and staff development for administrators and classroom personnel**
- **Workshops**
- **Technical assistance to CESA groups**
- **Assistance to colleges and universities in establishing early childhood teacher training programs**
- **Technical assistance to state agencies and other programs that provide early childhood education**
- **Development of state regulations, standards and guidelines for early childhood programs**
- **Dissemination of information, materials, resources and research to local systems**
- **Participation on teams and ad hoc committees for local system self study**
- **Development and leadership services for state and local preassessment programs**
- **Technical assistance and participation in the development of programs for parents and parent involvement**
- **Preparation of publications for dissemination**

Consultants

Carol A. Budack (912) 681-5403
P.O. Box 346
105 North Gate Office Center
Statesboro 30458
Serves: **Bryan, Bulloch, Camden, Candler, Chatham, Effingham, Evans, Glynn, Liberty, Long, McIntosh, Tattnall and Wayne Counties.**

Betty M. White (912) 423-4047
Federal Building P.O. Drawer P
120 W. Central Ave.
Fitzgerald 31750
Serves: **Baker, Ben Hill, Berrien, Brooks, Calhoun, Colquitt, Cook, Decatur, Dougherty, Early, Echols, Grady, Irwin, Lanier, Lee, Lowndes, Miller, Mitchell, Seminole, Terrell, Thomas, Tift, Turner and Worth Counties and Fitzgerald, Pelham, Thomasville and Valdosta Cities.**

Sharon Meinhardt (404) 571-7313
P.O. Box 8388
4509 Armour Rd.
Columbus 31907
Serves: **Chattahoochee, Clay, Crisp, Dooly, Harris, Macon, Marion, Muscogee, Quitman, Randolph, Schley, Stewart, Sumter, Talbot, Taylor and Webster Counties and Americus City.**

Peggy Downing (404) 828-4661
Executive Park
3037 Claussen Rd.
Augusta 30909
Serves: **Baldwin, Burke, Columbia, Emanuel, Glascock, Hancock, Jasper, Jefferson, Jenkins, Johnson, Lincoln, McDuffie, Putnam, Richmond, Screven, Taliaferro, Warren, Washington, Wilkes and Wilkinson Counties.**

Rose Shuman (912) 537-9494
104 W. First St.
Vidalia 30474
Serves: **Appling, Atkinson, Bacon, Bleckley, Brantley, Charlton, Clinch, Coffee, Dodge, Jeff Davis, Laurens, Montgomery, Pierce, Pulaski, Telfair, Toombs, Treutlen, Ware, Wheeler and Wilcox Counties and Dublin, Vidalia and Waycross Cities.**

Jane Caballero (404) 228-7346
122 S. 13th St.
Griffin 30223
Serves: **Bibb, Butts, Carroll, Clayton, Coweta, Crawford, Douglas, Fayette, Fulton, Heard, Henry, Houston, Jones, Lamar, Meriwether, Monroe, Newton, Peach, Pike, Spalding, Troup, Twiggs and Upson Counties and Atlanta, Carrollton, Hoganville, LaGrange and Thomaston Cities.**

Charles Shepherd (404) 625-0029
P.O. Box 1206
108 N. Court St.
Calhoun 30701
Serves: **Bartow, Catoosa, Cherokee, Cobb, Dade, Fannin, Floyd, Gilmer, Gordon, Haralson, Murray, Paulding, Pickens, Polk, Walker and Whitfield Counties and Bremen, Calhoun, Cartersville, Chickamauga, Dalton, Marietta, Rome and Trion Cities.**

Billie Jean Ellington (404) 532-5414
First Federal Savings and Loan Building
Room 311
311 Green St.
Gainesville 30501
Serves: **Banks, Barrow, Clarke, Dawson, DeKalb, Elbert, Forsyth, Franklin, Greene, Gwinnett, Habersham, Hall, Hart, Jackson, Lumpkin, Madison, Morgan, Oconee, Oglethorpe, Rabun, Rockdale, Stephens, Towns, Union, Walton and White Counties and Buford, Commerce, Decatur, Gainesville, Jefferson and Social Circle Cities.**

Publications from the Georgia Department of Education

Kindergarten in Georgia, 1979 Available in microfiche or booklet

Mathematics for Georgia Schools, Vol. I (Grades K-3), 1976

Music for Middle Grades (Grades 6-8), 1979 Available in microfiche

Essential Skills for Georgia Schools (K-12), 1980 Available in microfiche

Building a Better You, Vol. I (Grades K-6)

Building a Better You, Vol. II (Grades 7-12)

Health Careers in Georgia

A Guide for Planning and Construction of Public School Facilities in Georgia — Media Center Facilities

A Guide for Planning and Construction of Public School Facilities in Georgia — Physical Education Facilities

Social Science Laboratory, Rev. 1978

A Reading Program for the 70's — Physical Education, 1978

A Reading Program for the 70's — Mathematics, 1975

A Reading Program for the 70's — Science, 1976

A Reading Program for the 70's — Social Studies, Rev. 1978

Viewpoints (Specific Suggestions to Teachers)

- *Health Education — Venereal Disease, K-12, 1976*
- *Homework, 1978*
- *Scheduled Conferences Among Parents, Teachers and Students, 1972*
- *The Preparation of Local Curriculum Materials, 1973*

Sources for Media Services

Division of Educational Media Services, Instructional Resources Unit

The following catalogs and schedules of resources produced or distributed by the division are available from school building media centers and system media contact persons.

- *Catalog of Classroom Teaching Films for Georgia Schools and Supplements.* Audiovisual Services, Georgia Department of Education, 1066 Sylvan Rd SW, Atlanta 30310.
- *Catalog of Classroom Teaching Tapes for Georgia Schools and Supplements.* Audiovisual Services, Georgia Department of Education, 1066 Sylvan Rd SW, Atlanta 30310.
- *Instructional Television Schedule for Georgia Educational Television Network.* An update is mailed monthly to school systems in the reception area for distribution to media specialists. Instructional Resources Unit, Georgia Department of Education, 1540 Stewart Ave SW, Atlanta 30310.
- *Instructional Television Schedule for WVAN-TV, Channel 9.* An update is mailed monthly to school systems in the reception area for distribution to media specialists. Instructional Resources Unit, Georgia Department of Education, 1540 Stewart Ave SW, Atlanta 30310.

Educational Information Center (EIC), Georgia Department of Education, 212 State Office Building, Atlanta, Georgia 30334.

Research service is provided to Georgia public school administrators and their central office staff. Computer and manual searches of Educational Resources Information Center (ERIC) data base which includes over 325,000 references to education documents related to exemplary projects and model teaching strategies can be requested by the media staff through the system media contact person.

Readers Services, Public Library Services, Georgia Department of Education, Atlanta 30334.

School media personnel can, through the local public library, assist in obtaining resources or sources of resources from Readers Services. "Selected List of Books for Teachers" (and supplements) and "Periodical List" (and supplements) identifying titles in the Public Library Services collection can be obtained by the school media specialists on request. Georgia Library Information Network (GLIN), another reference and bibliographic service, provides access to publications in the collections of academic and public libraries. Long term loans of children's books, pamphlets and periodicals for workshops and inservice activities as well as individual use can also be arranged by the media specialist.

Georgia Learning Resources System

Services

The Georgia Learning Resources System (GLRS) is a teacher support system for educators and other professionals who work with exceptional children. Any individual who works with exception children may use the services of GLRS. The services include the following.

- Maintaining an instructional materials center where educators can preview and borrow materials
- Providing in-service training through workshops and conferences on effective use of media and educational equipment, new teaching techniques and innovative instructional methods
- Sponsoring various special projects to introduce new ideas and materials being used successfully with exceptional children
- Disseminating information to educators about the areas of exceptionality, programs and services offered to exceptional children in Georgia and meetings and conferences of interest to educators

Agencies

State Coordinator, GLRS
Katheryn B. Bush
Program for Exceptional Children
Georgia Department of Education
State Office Building
Atlanta 30334
(404) 656-2425

Coastal Area Center, GLRS
Nell Veale, Director
Edith Padgett, Child Serve Director
Armstrong State College
Room 109, Victor Hall
11935 Abercorn St.
Savannah 31406
(912) 927-5239
Coastal Area GLRS Satellite*
2400 Reynolds St.
Brunswick 31520
(912) 264-6222
Serves: **Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long and McIntosh Counties**

East Central Center, GLRS
Marcia Vinci, Director
Marilyn Craft, Child Serve Director
Wrightsville Primary School
P.O. Box 275
Wrightsville 31096
(912) 864-3246
GLRS Satellite — Heart of Georgia CESA*
312 S. Main St.
Eastman 31023
(912) 374-5244
Serves: **Baldwin, Bleckley, Dodge, Hancock, Jasper, Johnson, Laurens, Montgomery, Pulaski, Putnam, Telfair, Treutlen, Washington, Wheeler, Wilcox and Wilkinson Counties and Dublin City**

East Georgia Center, GLRS
Joan Holmes, Director
Margaret Hawkins, Child Serve Director
Joseph Lamar Elementary School
970 Baker Ave.
Augusta 30904
(404) 736-0760

Louisville Center, GLRS*
Louisville Academy
Louisville 30434
(912) 625-8156

Washington-Wilkes Center, GLRS Satellite*
Washington-Wilkes Kindergarten Building
313A N. Alexander Ave.
Washington 30673
(404) 678-1870
Serves: **Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Richmond, Screven, Taliaferro, Warren and Wilkes Counties**

Metro East Center, GLRS
Randall F. Dobbs, Director
Betsy Primm, Child Serve Director
Robert Shaw Center
385 Glendale Rd.
Scottdale 30079
(404) 292-7272, ext. 227
Serves: **DeKalb, Fulton and Rockdale Counties, Decatur City**

Metro South Center, GLRS
Myrna Stenson, Director
Elizabeth Lacey, Child Serve Director
Griffin CESA
P.O. Drawer H
Griffin 30224
(404) 227-0632
Serves: **Butts, Fayette, Henry, Lamar, Newton, Pike, Spalding and Upson Counties, Thomaston City**

Metro West Center, GLRS
John Eckert, Director
2268 Adams Dr. NW
Atlanta 30318
(404) 352-2697
Helen Warden, Child Serve Director
Atlanta Public Schools
224 Central Ave. SW
Atlanta 30303
(404) 659-3381
Serves: **Clayton, Cobb, Douglas and Gwinnett Counties, Atlanta, Buford and Marietta Cities**

Middle Georgia Center, GLRS
Victor Hobbs, Director
Warren Moncrief, Child Serve Director
3769 Ridge Ave.
Room 101 (Alexander IV School)
Macon 31204
(912) 474-1513
Middle Georgia Center, GLRS Satellite*
Pearl Stephens School
Reid St.
Warner Robins 31093
(912) 922-1937
Serves: Bibb, Crawford, Houston, Jones, Monroe, Peach and Twiggs Counties

North Central Center, GLRS
James K. Carson, Director
North Georgia CESA
5 West Side Square
Ellijay 30540
(404) 635-5391
Frances Hensley, Child Serve Director
Route 3, Box 232-A, Hwy. 5 South
Ellijay 30540
(404) 635-5391
Serves: **Cherokee, Fannin, Gilmer, Murray, Pickens and Whitfield Counties, Dalton City**

Northeast Georgia Center, GLRS
Gloria Frankum, Director
Susan Easterbrooks, Child Serve Director
Northeast Georgia CESA
375 Winter Dr.
Winterville 30683
(404) 742-8292
Serves: **Barrow, Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Oglethorpe and Walton Counties, Commerce, Jefferson and Social Circle Cities**

North Georgia Center, GLRS
Jerry Cleveland, Director
Phillip Wright, Child Serve Director
P.O. Box 566
Cleveland 30528
(404) 865-2043
Serves: **Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union and White Counties, Gainesville City**

Northwest Georgia Center, GLRS
Joe Pullen, Director
Don Kinder, Child Serve Director
115 W. Washington St.
Summerville 30747
(404) 857-5421
Northwest Georgia GLRS Satellite*
Rt. 1, Box 255
Cedartown 30125
(404) 685-5443
Serves: **Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding, Polk and Walker Counties, Bremen, Calhoun, Cartersville, Chickamauga, Rome and Trion Cities**

South Central Center, GLRS
Rose Ann Knowlton, Director
Vacant, Child Serve Director
Child Development Center
1492 Bailey St.
Waycross 31501
(912) 285-6191
Serves: **Atkinson, Bacon, Brantley, Charlton, Clinch, Coffee, Pierce and Ware Counties, and Waycross City.**

South Georgia Center, GLRS
Cuba McKay, Director
Lynn Taylor, Child Serve Director
Westside School
Rt. 10, Box 155
Valdosta 31601
(912) 247-3514
Serves: **Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift and Turner Counties, Fitzgerald and Valdosta Cities.**

Southeast Center, GLRS
Faye Waugh, Director
801 Washington St.
Vidalia 30474
(912) 537-7797
Serves: **Appling, Bulloch, Candler, Evans, Jeff Davis, Tattnall, Toombs and Wayne Counties, Vidalia City**

Southwest Georgia Center, GLRS
Larry Aultman, Director
Jim Whiting, Child Serve Director
P.O. Box 1470
400 S. Monroe St.
Albany 31703
(912) 432-9151
Southwest Georgia GLRS Satellite*
Early County Junior High School
Blakely 31723
(912) 723-3749
Southwest Georgia GLRS Satellite*
Grady County Board of Education
Cairo 31728
(912) 377-3701
Serves: **Baker, Calhoun, Colquitt, Decatur, Dougherty, Early, Grady, Lee, Miller, Mitchell, Seminole, Terrell, Thomas and Worth Counties, Pelham and Thomasville Cities.**

West Central Center, GLRS
Mary Yeomans, Director
Richard Roberson, Child Serve Director
P.O. Box 4569
Whitesburg 30185
(404) 832-0506
Serves: **Carroll, Coweta, Heard, Meriwether and Troup Counties, Carrollton, Hogansville, LaGrange and West Point Cities**

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West Georgia Center, GLRS
Margie Oliver, Director
1532 Fifth Ave.
Columbus 31901
(404) 324-5661, ext. 257
West Georgia GLRS Satellite*
Sumter County Instructional Materials Center
Americus 31709
(912) 924-4955
Cathy Webb, Child Serve Director
5801 Armour Rd.
Columbus 31904
(404) 323-0551
Serves: **Chattahoochee, Clay, Crisp, Dooly, Harris, Macon, Marion, Muscogee, Quitman, Randolph, Schley, Stewart, Sumter, Talbot, Taylor and Webster Counties, Americus City**

***Satellite Center of the preceding GLRS Center.**

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Georgia Cooperative Educational Service Agencies

Services

Cooperative Educational Service Agencies (CESA) were established for the purpose of sharing services which are designed to improve the effectiveness of the educational programs of member local school systems. It is not compulsory for a school system to be a member of CESA, but all local school systems located within a service area may become a member of the CESA serving that area. CESA may provide the following services.

- Develop and publish educational materials for participating systems
- Provide technical assistance to teachers, principals and administrators of local systems
- Analyze problems of local systems and develop the means by which they may solve these problems

Location

Central Savannah River Area CESA
Louise L. McCommons, Director
Mt. Pleasant Rd.
P. O. Drawer 1025
Thomson 30824
(404) 595-6990 or 6991
Serves: **Burke, Columbia, Emanuel, Glascock, Jefferson, Jenkins, Lincoln, McDuffie, Screven, Taliaferro, Warren and Wilkes Counties**

Chattahoochee Flint CESA
Homer Foreman, Director
Box 588
Americus 31709
(912) 928-1290
Serves: **Americus City and Chattahoochee, Clay, Crisp, Dooly, Harris, Macon, Marion, Quitman, Randolph, Schley, Stewart, Sumter, Talbot, Taylor and Webster Counties**

Coastal Plains CESA
Cary Moore, Director
Rt. 10, Box 155
Valdosta 31601
(912) 247-3482
Serves: **Ben Hill, Berrien, Brooks, Cook, Echols, Irwin, Lanier, Lowndes, Tift and Turner Counties and Fitzgerald and Valdosta Cities**
Operates the Comprehensive Psychoeducational Services of South Georgia (CPES) in Valdosta

First District CESA
Inman Davis, Director
Zetterower Rd.
P. O. Box 826
Statesboro 30458
(912) 764-6397
Serves: **Appling, Bryan, Bulloch, Camden, Candler, Effingham, Evans, Jeff Davis, Liberty, Long, McIntosh, Tattnall, Toombs and Wayne Counties and Vidalia City**
Operates Child Development Centers in Statesboro, Collins, Baxley and Jesup

Griffin CESA
R. E. Flanders, Director
119 W. Vineyard Rd.
P. O. Drawer H
Griffin 30224
(404) 227-0632
Serves: **Butts, Fayette, Henry, Lamar, Pike, Spalding and Upson Counties and Thomaston City**

Heart of Georgia School Systems CESA
Benny B. Wade, Director
Extension Bldg., Anson Ave.
P. O. Box 368
Eastman 31023
(912) 374-2240
Serves: **Bleckley, Dodge, Laurens, Montgomery, Pulaski, Telfair, Treutlen, Wheeler and Wilcox Counties and Dublin City**

Metro CESA
Charles Thompson, Executive Director
2268 Adams Dr. NW
Atlanta 30318
(404) 352-2697
Serves: **Buford, Decatur and Marietta Cities and Clayton and Douglas Counties**

Middle Georgia CESA
Warner J. Raines, Director
Knoxville St. at Vineville St.
P.O. Box 1148
Fort Valley 31030
(912) 825-3132
Serves: **Crawford, Jones, Monroe, Peach and Twiggs Counties**

Northeast Georgia CESA
C. L. Cain, Director
375 Winter St.
Winterville 30683
(404) 742-8292
Serves: **Barrow, Clarke, Elbert, Green, Jackson, Madison, Morgan, Oconee, Oglethorpe and Walton Counties and Commerce, Jefferson and Social Circle Cities**

North Georgia CESA
Jack Holcomb, Director
Rt. 3, Box 232A
Ellijay 30540
(404) 635-5391
Serves: **Cherokee, Fannin, Gilmer, Murray, Pickens and Whitfield Counties and Dalton City**

Northwest Georgia CESA
Charles L. Florida, Director
Rt. 1, Box 255
Cedartown 30125
(404) 684-5443 or 5444
Serves: **Bartow, Catoosa, Chattooga, Dade, Floyd, Gordon, Haralson, Paulding and Polk Counties and Calhoun, Bremen, Chickamauga, Trion and Cartersville Cities**
Operates the Evaluation and Service Center in Rome

Oconee CESA
Lester Herman, Director
N. Harris St.
P.O. Box 699
Sandersville 31082
(912) 552-5178
Serves: **Baldwin, Hancock, Jasper, Johnson, Putnam, Washington and Wilkinson Counties**

Okefenokee CESA
A. L. Woodard, Director
Rt. 5, Box 406
Waycross 31501
(912) 285-6151
Serves: **Atkinson, Bacon, Brantley, Charlton, Clinch, Coffee, Pierce and Ware Counties**
Operates Harrell Child Development Center in Waycross

Pioneer CESA
Charles Allen, Director
Rt. 4, Box 145
Old White Creek Sch. Bldg.
Cleveland 30528
(404) 865-2141
Serves: **Banks, Dawson, Forsyth, Franklin, Habersham, Hall, Hart, Lumpkin, Rabun, Stephens, Towns, Union and White Counties and Gainesville City**
Operates Alpine Center in Gainesville

Southwest Georgia CESA
Boyd Israel, Director
Mercer Ave.
P.O. Box 145
Leary 31762
(912) 792-6195
Serves: **Baker, Calhoun, Colquitt, Decatur, Early, Grady, Lee, Miller, Seminole, Terrell, Thomas and Worth Counties and Pelham and Thomasville Cities**

West Georgia CESA
John Holter, Director
1090 E. Depot St.
LaGrange 30240
(404) 882-0007
Serves: **Carroll, Coweta, Heard, Meriwether and Troup Counties and Carrollton, Hogansville, LaGrange and West Point Cities**
Operates West Georgia Center—GLRS

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Professional Organizations and Publications

Association for Childhood Education International (ACEI)
3615 Wisconsin Ave NW
Washington, DC 20016
(202) 363-6963
Publication: *Childhood Education*

Association for Supervision and Curriculum Development (ASCD)
1701 K St. NW, Suite 1100
Washington, DC
(202) 467-6480
Publications: *Educational Leadership, Yearbook, News Exchanges, also Booklets*

Council for Exceptional Children (CEC)
1920 Association Dr.
Reston, VA 22091
(703) 620-3660
Publications: *Exceptional Children, Exceptional Child Education Resources*

Georgia Association of Educators (GAE)
3951 Snapfinger Parkway
Decatur, Georgia 30034
(404) 289-5867
Publications: flyers, legislative bulletins, newspapers, research reports, special publications, statistical reports

Georgia Association on Young Children (GAYC) Linda Pruitt, President (1981-82)
Rt. 3 Box 259-A
Jasper, Georgia 30143
Publications: GAYC Newsletter; *Today's Child*

Georgia Congress of Parents and Teachers
114 Baker St, NE
Atlanta, GA 30312
(404) 659-0214
Publications: annual report, bulletins, statistical reports

Georgia Preschool Association
Anne Vining
Atlanta Speech School
3160 Northside Parkway NW
Atlanta, GA 30318
Georgia Higher Education for Early Child/Childhood Development. Membership includes early childhood and child development professors teaching in Georgia colleges and universities. The office of the organization's president changes annually and is the headquarters for the organization. Check with the State Office of Early Childhood Education for present location of the organization's headquarters.

International Reading Association (IRA)
800 Barksdale Rd, PO Box 8139
Newark, DL 19711
(302) 731-1600
Publications: *Reading Teacher, Journal of Reading, Reading Research Quarterly*

National Association for Education of Young Children (NAEYC)
1834 Connecticut Ave NW
Washington, DC 20009
(202) 232-8777
Publications: *Young Children*

National Association for Gifted Children
217 Gregory Drive
Hot Springs, AK 71901
(501) 767-6933
Publication: *Gifted Child* (quarterly)

National Council for Teachers of English
1111 Kenyon Road
Urbana, IL 61801
(217) 328-3870
Publications: *Abstracts of English Studies, English Journal, Language Arts, College English, Council-Grams, College Composition, Communication, English Education, Research in the Teaching of English*

National Education Association (NEA)
1201 16th St. NW
Washington, DC 20036
Publications: journals, newsletters, research reports, statistical reports

National Education Association (NEA)
Georgia Branch Headquarters
3951 Snapfinger Parkway
Atlanta, GA 30034
(404) 289-4482

Society for Research in Child Development (SRCD) University of Chicago
5801 Ellis Ave
Chicago, IL 60637
(312) 753-3370
Publications: *Child Development Quarterly, Child Development Abstracts and Bibliography, Review of Research, Child Development and Monographs of the SRCD*

Southern Association on Children Under Six (SACUS)
Box 5403 Brady Station
Little Rock, AK 72215
Publication: *Dimensions*

Appendices B, C and D

Objectives for Planning

Note: Objectives may be charted on a planning grid to enable teachers to integrate process and Content Objectives.

Examples may be found on pages 185, 190 and 195.

APPENDIX B
AFFECTIVE DOMAIN
OBJECTIVES FOR PLANNING

	KEY CONCEPTS				
PROCESSES	**SELF UNDERSTANDING**	**INTERPERSONAL RELATIONS**	**FEELINGS**	**VALUES AND EXPERIENCES**	**CHANGE**
RECEIVING	The Uniqueness of Oneself	Understanding Relationships with Family, Peers and Adults			
RESPONDING	Effective Management of One's Self and One's Environment	Establishing Relationships with Family, Peers and Other Adults			
VALUING					

APPENDIX B
AFFECTIVE DOMAIN OBJECTIVES FOR PLANNING

Key

I - Introduce
D - Develop
R - Reinforce

TOPIC		CONCEPT/SKILL
Self Understanding — is Uniqueness of Self	IDR	Describes self physically
	ID	Discusses the importance of accepting self
	ID	Identifies self as someone other people like
	IDR	Functions as an individual independent of family
	IDR	Assumes responsibility for personal care
	ID	Thinks for self, solves own problems
	IDR	Works independently to complete tasks
	ID	Attempts new tasks with anticipation of success
	IDR	Displays self-confidence
	I	Sets realistic goals
	I	Takes pride in accomplishments
	ID	Accepts and expresses own feelings
	I	Uses personal values as a rationale for behavior
	I	Identifies own capabilities and limitations
	I	Accepts own capabilities and limitations
	ID	Accepts success and praise in a constructive manner
	I	Accepts criticism and failure in a constructive manner
Self Understanding Effective Management of Self and Environment	I	Describes how attitudes and feelings affect how one manages the environment
	ID	Discusses how personal behavior affects environment
	IDR	Accepts role as group member
	ID	Accepts role of leader in a group
	ID	Works with others in managing the environment
	IDR	Defends wishes and opinions appropriately

	ID	Anticipates the consequences of behavior
	ID	Regulates own behavior
	ID	Accepts responsibility for choices
	ID	Uses time and resources wisely
	IDR	Responds to requests or directions
	IDR	Follows directions
	IDR	Persists in completing a task
	IDR	Cleans up after work period
Interpersonal Relations — Understanding Relationships with Family, Peers and Adults	ID	Describes the nature of the parent-child relationship
	IDR	States that families are different
	ID	Describes the nature of sibling relationships
	I	Describes the value of family loyalty
	ID	Values friendships beyond the family
	ID	Describes healthy attitudes about self
	I	Describes the rights and responsibilities of others toward self
Interpersonal Relations Establishing Relationships with Family, Peers and Other Adults	ID	States that behavior affects relationships with others
	ID	Uses a variety of behavior to successfully interact
	IDR	Makes friends in school
	IDR	Initiates interaction with peers
	IDR	Initiates interaction with adults
	IDR	Uses good manners (please, thank you)
	IDR	Considers and respects the ideas of others
	IDR	Listens while others speak
	ID	Modifies role as a follower or leader in a group situation
	IDR	Participates as a contributing member of a group
	ID	Interacts with others to achieve goals
	ID	Values the thinking and action of others
	IDR	Feels valued by others
	ID	Cooperates and compromises
	ID	Earns worthwhile group approval
	IDR	Respects the rights and property of others
	ID	Understands rules
	IDR	Abides by rules
	IDR	Takes turns
	ID	Seeks help when necessary
	IDR	Shares teacher time

	IDR	Takes care of and uses materials and equipment correctly
Feelings	ID	States that everyone has feelings
	ID	Identifies feelings
	ID	Accepts own feelings
	ID	Empathizes with the feelings of others
	ID	Expresses feelings appropriately and sensitively
	ID	Copes with a variety of feelings
	ID	States that feelings and attitudes affect relationships with others
	ID	States that one is affected by the feelings of others
	ID	Discusses that people's reactions to a given situation may be similar or different
	ID	Discusses that one's situation may elicit variety of feelings in an individual
	I	Discusses that one's feelings change over time
	I	Discusses that feelings are a result of perceptions and past experiences
	I	States that feelings are a motivation for behavior
	I	Discusses that one's behavior has a motivational effect on others
	I	Discusses success as important in motivating oneself and others
Values and Experiences	I	Defines values
	I	Discusses ways values affect behavior
	I	Discusses ways that values reflect cultural experiences
	I	Discusses that values may be different because cultures are different
	I	Discusses that values other than one's own reflect different cultural experiences
	I	Defines ethical principles (honesty, loyalty)
	I	Describes certain ethical principles common to a majority of cultures in our society
	I	Discusses the rights and responsibilities of participation in the democratic process
	I	Discusses role as a citizen of the United States of America
	ID	Respects individual beliefs

Change

ID	Defines change
ID	Identifies change as a normal part of life
I	Discusses that change contributes to growth
I	Accommodates changes
I	Discusses alternative reactions to change
ID	Creates ways to solve problems

APPENDIX C
PSYCHOMOTOR DOMAIN OBJECTIVES FOR PLANNING

Movement Abilities	Perception Abilities	Physical Abilities
Basic Movements	Use of Senses	Endurance
Locomotor Movements	Tactile	Strength
Nonlocomotor Movements	Auditory	Flexibility
Manipulative Movements	Visual	Agility
Skilled Movements	Olfactory	Speed
Creative Movements	Taste	
	Combinations of Advanced Perceptual Motor Skills	

APPENDIX C
PSYCHOMOTOR DOMAIN OBJECTIVES FOR PLANNING

Key

I - Introduce
D - Develop
R - Reinforce

TOPIC		CONCEPT/SKILL
Movement Abilities		
Basic Movements		
Locomotor Movements	IDR	Performs basic locomotor movements such as a. crawling b. creeping c. climbing d. descending e. hopping f. leaping g. marching h. running i. walking j. falling k. rolling
	ID	Performs combinations of basic locomotor movements such as a. galloping b. skipping c. sliding d. step hopping
	ID	Maintains appropriate good posture habits while sitting, walking and standing
Nonlocomotor Movements	ID	Performs basic nonlocomotor movements such as a. balancing b. bending c. grasping d. holding e. lifting f. pulling g. releasing h. pushing i. stretching j. turning k. sitting l. standing m. twisting n. extending o. curling
Manipulative Movements	ID	Manipulates small and large objects in activities such as a. kicking b. bouncing c. rolling d. jumping rope e. striking f. pitching g. throwing h. catching i. trapping

	ID	Uses proper techniques and methods to stoop, lift, carry, push and pull objects
	IDR	Performs daily living skills such as a. eating b. sorting c. cleaning d. repairing e. constructing
Skilled Movements	ID	Performs basic movements by combining locomotor and non-locomotor movements a. bouncing while running b. bending while walking c. twisting and catching d. climbing e. kicking and running f. bending and rolling g. throwing and twisting
	ID	Differentiates even and uneven rhythm
	ID	Coordinates basic movements and various rhythms
	I	Performs basic gymnastics and tumbling skills
	I	Demonstrates the movement principles used in throwing, catching, dancing
	I	Describes the movement principles used in activities such as throwing, catching, dancing
	I	Describes growth and development factors which affect movement such as heart rate, rest periods, warmup and body rest
Creative Movements	ID	Uses movement to interpret ideas
	ID	Expresses creative ideas, establishes own rhythm and develops own dance
	ID	Uses rhythms such as heartbeat, toe tap, hand clap, stomp
Perception Abilities		
Use of Senses		
Tactile	ID	Refines sensory skills using tactile discrimination
Auditory	ID	Refines sensory skills using auditory discrimination
Visual	ID	Refines sensory skills using visual discrimination
Olfactory	ID	Refines sensory skills using olfactory discrimination
Taste	ID	Refines sensory skills using taste discrimination
Combinations of Advanced Perceptual Motor Skills	ID	Moves in such a way as to demonstrate a spatial awareness of people and objects and their relationship to each other and to the environment
	ID	Describes spatial relationships

	ID	Describes space relationships in games, dance, gymnastics, track and field
	I	Uses combinations of sensory skills a. eye-foot coordination b. eye-hand-foot coordination c. eye-hand coordination
	IDR	Controls manipulatives (puzzles, pegboards)
	ID	Controls tools (pencils, brushes, crayons)
	IDR	Cuts on line with scissors
Physical Abilities		
Endurance	ID	Sustains physical effort appropriate for age level
Strength	I	Exerts a maximum amount of force against resistence appropriate for age level
Flexibility	ID	Develops the optimum range of motion that he or she is capable of achieving in the joints of body appropriate to age level
Agility	I	Performs quick, precise and spontaneous movements appropriate for age level
Speed	I	Demonstrates ability to move swiftly appropriate to age level
Physical Fitness	ID	Exhibits sufficient stamina for physical education activities
	I	Describes several approaches to attaining and maintaining physical fitness
	ID	Reaches a functional personal fitness level
Sports and Leisure Skills	ID	Participates in traditional games
	ID	Creates new games
	ID	Performs dances including folk, fad, creative, social and modern
	I	Participates in lead-up games for team sports
	I	Discusses outdoor activities such as camping, outdoor cooking, hiking, and fishing
	I	Discusses personal participation in lifetime sports (such as baseball, jogging, bicycle riding, gymnastics, dancing)
Applying Skills and Knowledge	I	Demonstrates that he or she is a knowledgeable spectator of many sports
	IDR	Knows rules and procedures
	IDR	States why rules and precedures must exist
	IDR	Follows directions
	IDR	Reports all accidents and injuries
	ID	Describes safety precautions required for protection in specific activities
	IDR	Uses safety precautions in specific activities

IDR Chooses activities which will not cause serious injury

ID Uses good judgment and common sense when participating in physical education activities

I Describes factors which modify participation in activities

I Explains how factors affect participation such as

a. age
b. maturation
c. attitudes
d. environmental forces
e. skill levels
f. physical condition
g. fatigue
h. stress
i. performance aids
j. smoking
k. alcohol and drugs

I Defines physical fitness, strength, flexibility, endurance, obesity

ID Describes effects of activities such as running, walking, bike riding

I Describes the effects of exercise on the heart and vascular system

I Illustrates or explains the relationship between exercise and weight control, nutrition, dieting, stress, tension and relaxation

I Describes the immediate and long-range effects of exercise on the body

ID Identifies where community recreational resources are located

I Describes careers in physical education

APPENDIX D
COGNITIVE DOMAIN OBJECTIVES FOR PLANNING

	CONTENT AREAS				
PROCESSES	**COMMUNICATION SKILLS**	**CREATIVE ARTS**	**MATHEMATICS**	**SCIENCE**	**SOCIAL STUDIES**
Observing Selecting Identifying					
Relating Classifying					
Interpreting Analyzing					
Inferring Experimenting Hypothesizing Predicting					
Measuring					
Communicating					
Synthesizing Formulating Models					
Evaluating					
Interacting					

Note

The objectives for the cognitive domain are presented in two organizational forms. First, the objectives are listed according to the process categories which cross over the five content areas. This grouping will enable teachers to identify the process objectives necessary to implement an interdisciplinary program.

The second organizational form provides the same objectives by the five content areas—communication skills, creative arts, mathematics, science and social studies. This format will enable teachers to visualize the scope of the content areas, ensuring adequate coverage of these skills and concepts during the primary grades.

APPENDIX D

(First Organizational Form)

COGNITIVE DOMAIN OBJECTIVES FOR PLANNING

Key

I - Introduce
D - Develop
R - Reinforce

Process Category

OBSERVING/SELECTING/IDENTIFYING

DEFINITIONS

Observing. Perceiving or obtaining information through looking, listening, feeling, smelling, touching, tasting

Selecting. Choosing, picking out, discriminating between or among several elements, objects or ideas

Identifying. Ascertaining the origin, nature or characteristics of an item

Communication Skills

ID Shows an interest in hearing materials read

IDR Actively listens in verbal activities

IDR Has adequate attention span for most classroom activities

IDR Recognizes and discriminates among common sounds and sound signals in the environment

IDR Hears differences in words (ride, rides)

IDR Identifies the number of sound units in spoken words

IDR Identifies

a. figurative language
b. idiomatic expressions
c. colloquial terms
d. allusions
e. point of view
f. slang

ID Identifies a variety of dialects

IDR Recognizes and uses sight vocabulary from

a. own vocabulary
b. high-frequency word lists
c. basal readers
d. words specific to content areas

IDR Identifies individual letters of words

ID Identifies the following from selections read by student
- a. the main ideas
- b. details
- c. sequence
- d. cause-effect relationships
- e. setting

I Identifies a variety of literary external structures (poetry, prose, fiction, nonfiction, drama)

I Recognizes literary forms (fables, myths, tales, short stories)

I Identifies literary types of literature (tragedy and comedy)

I Identifies the purpose of a variety of literature
- a. artistic expression
- b. recording events, ideas and values of diverse societies and cultures (past through the present)
- c. entertainment and diversion
- d. extension of individual knowledge and experience
- e. comparing values, beliefs and behavior

IDR Copies simple shapes, designs, letters

IDR Recalls shapes, words, letters when given a visual cue

ID Identifies nouns, noun determiners, verbs, personal pronouns, adjectives, adverbs

ID Identifies various types of sentences—declarative, interrogative, commands

ID Spells words correctly
- a. words with regular consonant sounds
- b. words containing blends
- c. words containing long vowels
- d. words containing short vowels
- e. words containing silent consonants
- f. words containing irregular vowel sounds
- g. words containing unexpected spelling contractions
- h. words with prefixes and suffixes
- i. days of the week, months of the year, holidays, proper names
- j. abbreviations

I Names four essentials of the communication process—source, message, medium, audience

I Identifies primary communication vehicles comprising American mass media

I Is receptive to the study of foreign languages, culture and civilization

I Participates willingly in the study of foreign languages, culture and civilization

I Derives genuine enjoyment from using the language skills and cultural knowledge being acquired

I Identifies customs and contemporary cultural patterns related to
- a. food
- b. clothing
- c. family life
- d. etiquette
- e. work and leisure activities
- f. education
- g. religion

I Differentiates among the sounds of foreign languages

Mathematics

IDR Identifies collections of objects as sets

ID Selects subsets of a given set

IDR Assigns the cardinal number to a set

IDR Assigns whole number names to sets of objects

ID Selects from a given set the subsets having a specified common property

ID Identifies common properties of a given set

ID Discusses the properties of odd and even numbers

ID Identifies odd and even numbers

I Identifies prime and composite numbers

I Identifies prime numbers

I Discriminates between an ordered pair of whole numbers used in a rate context and an ordered pair of whole numbers used in a fraction context

I Identifies one-to-one, one-to-many correspondences

IDR Identifies common two- and three-dimensional geometric shapes

ID Counts the number of units in a given collection of units arranged in different configurations

ID Determines by sight which of two given angles is larger or smaller

I Identifies sets of points, including points, lines, planes, three dimensional figures, line segments, open curves, closed curves, angles, triangles, rectangles, squares and circles

IDR Identifies the date by stating the month, day and year

ID Reads a temperature scale using the Fahrenheit and the Celsius scales

IDR Names common coins and bills to five dollars

Creative Arts

ID Describes the content of art words

IDR Recognizes basic geometric shapes

ID Identifies major points of interest, foreground and background

I Identifies well-known works of art

I Names artists who produced specific works of art

I Identifies different notes

ID Identifies the basic elements of music
- a. melody
- b. harmony
- c. tone color
- d. rhythm
- e. tempo

ID Describes the form of a variety of musical selections

I Defines form in music

I Identifies a variety of styles and types of music

I Identifies musical terminology and symbols

ID Recognizes and names musical instruments

ID Identifies variations in
- a. form
- b. tempo
- c. dynamics
- d. beat
- e. meter
- f. rhythm

ID Identifies a repertoire of well-known compositions

ID Supplies biographical facts about composers

Social Studies

ID Identifies best sources to answer given questions

I Gathers information necessary for understanding an issue

IDR Uses first names of at least five classmates

IDR Locates classroom, bathroom, cafeteria, office

IDR States two school rules

IDR Names three occupations associated with the school

IDR States the purpose of the school

IDR States name, address, phone number

IDR Names main body parts—head, eyes, nose, mouth, neck, arms, fingers, hand, waist, leg, chest, feet, toes, shoulder, elbow

IDR States five physical characteristics of self

IDR States three physical characteristics that cannot be changed—height, skin color, sex, eye color

ID Describes and discusses four different emotions

ID Lists three actions which help make and keep friends

IDR Names the family members who have primary responsibility for providing for the family's basic needs

ID Lists rules each family member follows

ID Describes events and customs special to own and other families

IDR Describes home

IDR Names three or more types of home

IDR Names the rooms in a house

ID Points out food, clothing and shelter that is representative of cultures other than own

IDR States the three basic needs of all people (food, clothing, shelter)

IDR Names the local community

ID Identifies the rules all citizens of the community must follow

ID Describes resources (goods, services) available within the local community

I Describes history unique to the local community

I Names different sources of products consume

ID States the importance of family members ch[illegible]g priorities for the way the family income is spent

IDR States that families must buy and pay for [illegible] goods and services

ID Defines "salary," "spending" and "saving"

ID States that work provides goods for satisfying peoples' needs and wants

ID States that people in a community work together to provide needed goods and services

ID States that all communities provide for peoples' needs

IDR Identifies at least two baby animals by their proper names (calf, colt)

ID Names at least two farm machines

ID Identifies at least one product obtained from each of three farm animals

ID Names at least three tasks farmers perform in maintaining a farm

IDR States three classroom rules

ID Lists 10 careers open to both men and women

IDR Identifies four circus animals

ID Discusses ways circuses move from place to place

ID Names two modes of transportation used to conserve gas

ID Identifies types of transportation

IDR Names various freight cars that are familiar sights in the local area

IDR Names at least three types of vessels used in water transportation

IDR Lists 10 historical or modern forms of communication

IDR Learns international distress signal

IDR Identifies left and right

ID Identifies pictures of volcanoes, mountains, rivers, lakes, deltas, bluffs and the like

IDR Names the continents and oceans of the world

ID Names the 50 states of the United States

IDR Locates Georgia on an unmarked political outline map of the United States

ID Labels the main agricultural products of various parts of the state

IDR Selects a country to study

IDR Selects a historical or contemporary person to research

ID Uses more than two resources in researching information

IDR Names the present President of the United States

IDR Names the present Vice President of the United States

IDR Names George Washington as the first President of the United States

I Distinguishes between instinctive and learned behaviors and activities

ID States local and state traffic rules and regulations (remember, these rules and regulations apply to all bicycle riders and pedestrians)

ID Identifies five bicycle safety rules that should be observed at all times

ID Lists school rules

ID Describes rules to be followed in riding a school bus

ID Describes rules to be followed on class trips

ID Describes ways to keep safe on the playground

I Describes safety procedures for fire and tornado drills

I Discusses procedures to be followed during dangerous weather conditions

I Describes safety procedures around animals

I Describes safety guides to be used when around firearms or explosives

I Names services the community provides to help keep citizens safe

I Describes medical emergency services available in the community

I Lists rules for safety in or on water

I Lists safety rules to be followed while participating in a variety of recreational activities

Science

ID Observes scientific phenomena

ID Identifies food preferences of different animals

ID Identifies ways in which plants and animals adapt to various environments

ID Identifies simple machines

I Identifies three types of rocks common to the region

ID Names three types of bodies of water (streams, lakes, ponds, oceans)

ID Identifies water as a major component of all living matter

ID Identifies vehicles that travel by air and by water

ID Names three kinds of dinosaurs

IDR Identifies oceans on a globe or map

ID Identifies location of Cape Canaveral on map

ID Identifies the shape of the earth

ID Names the four seasons

I Describes the earth's crust

ID Describes how seasons differ

ID Describes effects of seasonal change on plants and animals

ID Names and describes the planets nearest to the sun

ID Names and describes planets farthest from the sun

ID Names the largest planet and the smallest planet

ID Names the nine planets

I Names five insects

I Identifies parts of insects body—head, thorax, abdomen

I Identifies five reptiles

I Names three types of fungi (bacteria, mold, mildew)

IDR Selects units most appropriate to measuring various objects, distances

I Distinguishes between a moth and a butterfly

I States the basic metric units (meter, liter, gram)

I Identifies common prefixes to be used with basic units (milli, centi, kilo)

I Distinguishes between meter/yard, liter/quart

I Lists the physical components of our universe

ID Identifies poison symbols

ID Identifies objects or substances which are dangerous if put in mouth

I Identifies the many vital health functions performed by locally available public and private health agencies

I Identifies foods which aid or hinder growth

ID Identifies the four basic food groups

I Identifies safe behavior which reduces the possibility of accidents, injury and death

I Identifies environmental factors that may result in injury or death

ID Names parts of the body

IDR Lists three ways to care for teeth

IDR Labels parts of a tooth

Process Category

RELATING/CLASSIFYING

DEFINITIONS

Relating. Associating elements, objects, events or ideas in some way

Classifying. Arranging elements, objects, events or ideas, according to common characteristics, into a system of grouping or subgrouping

Communication Skills

IDR Recalls the following when specifically stated by the speaker
- a. main ideas
- b. details
- c. sequence of events
- d. cause-effect
- e. setting
- f. characters
- g. feelings
- h. conclusion

ID Compares and contrasts information given orally

IDR Repeats auditory sequences of letters, numbers, words

ID Uses logical sequence in presenting ideas

IDR Matches beginning and ending sounds of words to appropriate letters of the alphabet (consonants, blends)

IDR Matches the sounds of vowels (long, short, controlled) presented in words orally with the symbols representing the sounds

IDR Supplies words which contain a given vowel or consonant

IDR Supplies words which rhyme with a given word

ID Classifies words from general to specific (animal, dog, collie)

IDR Demonstrates knowledge of alphabetic sequence

ID Alphabetizes words up to the third letter

ID Organizes outline using Roman numerals and letters, main topics and subtopics

IDR Demonstrates interest in a variety of written material

IDR Holds writing instrument correctly

IDR Positions paper correctly

IDR Spaces letters and words correctly

I Identifies propaganda devices of mass media (glittering generality, card stacking, name calling, testimonial, bandwagon, elitism)

I Identifies visual stereotypes in film and television including hero, heroine, villain, man, woman, child, family, professional groups, ethnic groups

I Identifies countries and regions where a foreign language is spoken

Mathematics

IDR Places two sets in one-to-one correspondence

IDR Puts in one-to-one correspondence the ordered set of whole numbers and points on a line

ID Names the ordered pair of whole numbers associated with fractional parts of units and sets

ID Shows that two or more different number pairs or fractions may be associated with equivalent fractional parts

ID Tabulates and describes sets

ID Finds the sum, product, difference and quotient for
- a. any two whole numbers, if a difference or a quotient exists
- b. any two rational numbers, if a quotient exists

ID Applies the distributive property of multiplication over addition without necessarily identifying the term distributive

ID Classifies elements of a set according to common characteristics

IDR Writes a subtraction sentence related to a given addition sentence

ID Writes a division sentence related to a given multiplication sentence excluding division by zero

ID Sorts objects or symbols using
- a. nonnumerical relations
- b. numerical relations

ID Demonstrates correspondence such as
- a. one-to-one
- b. one-to-many
- c. many-to-one
- d. many-to-many

ID Illustrates the three basic numerical relations to greater than, less than or as many as (equal to)

ID Classifies elements of a set according to specified properties

I Applies equivalence relations to elements such as fractions, ratios and geometric figures

I Classifies sets of points including points, lines, planes, three dimensional figures, line segments, open curves, closed curves, angles, triangles, rectangles, squares and circles

Creative Arts

ID Identifies patterns

I Reads about art

I Describes a variety of careers in art

ID Dramatizes sequences of action in story

ID Develops an appreciation for creative, folk, fad, social and modern dance

I Describes a variety of careers in music

Social Studies

ID States the names and describes the role of the teacher, principal, librarian, cafeteria manager

ID Describes needs of all people which are similar to own needs

ID Discusses the relationship between interests and the type of recreation selected

ID Discusses work as an integral part of a lifestyle

I Discusses that within an occupational area or group there are a wide variety of career choices

ID Is familiar with the roles of helpers who dispense needed goods—grocer, druggist, clothing salesperson, clerk, delivery person

ID Is familiar with the roles of helpers who dispense services—doctor, dentist, nurse, bus driver, cook, millworker, banker, barber, garbage collector, teacher and school staff, librarian, builder, plumber

ID Lists services commonly available in communities

ID Lists two services provided by each of five community helpers

ID Describes the goods and services available in the local community

I Lists the services which all people require regardless of location

ID Describes at least five careers pertaining to transportation, public service, technology, construction and the like

ID Names several local industries and the products they manufacture

I Discusses careers associated with the social and cultural events available in the local community

IDR Honors each child by celebrating birthdays

ID Compares holiday traditions observed by families of classmates with holiday traditions observed by own family

IDR Compares two different farm animals by size, body covering, use, behavior

ID Discusses that individuals have potential for a variety of jobs but that all jobs are important

I Describes personal abilities and interests which might lead to particular careers

ID Identifies tools and equipment associated with several occupations

ID Discusses that clowns are people whose job it is to make people laugh

IDR Labels and describes physical features of the community

ID Compares daily life of self and children of the same age in a country studied

ID Compares customs of the country to customs practiced in the United States

ID Describes five physical or cultural characteristics of the country

ID States four ways to travel from place to place—water, rail, roads and air

ID Discusses the roles of transportation and communication helpers—boat captain, sailor, truck driver, bus driver, ambulance driver, train engineer, train conductor, airplane pilot, airplane cabin attendant, telephone operator, radio announcer, TV announcer

ID Classifies various forms of transportation by power source

IDR Discusses ways in which holidays are celebrated today

ID Describes daily life in colonial America

ID Describes the customs of an Indian tribe

ID Compares the customs of several tribes

IDR Describes the location of the various objects in environment (near, far, up, down, under, back, front, here, there, above, forward, backward)

I Labels and describes physical features of the community, state, region, country or continent

I Uses bibliographic format in citing resources

ID Describes George Washington's boyhood in colonial America

ID Describes everyday life in pioneer America

IDR Compares America's first flag to the flag in use today

I Describes the people living in America prior to Columbus' visit

I Locates and describes places in America that honor heroes or main events in America's history

I Lists two facts which have been learned and the actions such learning has produced

ID Describes own bicycle usage and safe operation

ID Identifies color and meaning when given specific traffic signs and shapes

I Describes the basic laws governing traffic, those which are uniform throughout the country

I Names the right-of-way rules for vehicles and pedestrians

ID Explains correct ways to use electrical equipment

I Lists ways fires can be prevented

I Describes what to do if injured at school

I Applies safety procedures during fire or tornado drills

I Describes first aid procedures for minor injuries (small cuts, splinters, mild burns and the like)

I Discusses current first aid precautions used in emergency situations

Science

ID Classifies data to solve problems

ID Classifies living things as plants or animals

ID Compares plants with respect to similarities and differences

ID Classifies animals according to those that hatch and those that are born alive

ID Distinguishes between vertebrates and invertebrates

IDR Defines matter

IDR Identifies solids, liquids, gases

IDR Defines gravity as a force

ID Classifies objects into two groups—things that magnets attract and things that magnets repel

I Distinguishes between static electricity and current electricity

IDR Classifies rocks according to texture and color

I Illustrates the size of the sun and the moon in relationship to the earth

I Defines meaning of "full moon"

I Defines the words air and water

I Distinguishes between carnivorous and herbivorous dinosaurs

I Defines oceanography

ID Makes a chronological list of space activities

I Names five useful minerals obtained from the ground

I Lists at least five minerals found in rocks

I Classifies rock by the method of formation (igneous, metamorphic, sedimentary)

IDR States name of the planet on which we live

I Matches temperatures with seasons

ID Defines solar system

I Discusses insecticides and discusses potential harmful effects of insecticides

ID Distinguishes reptiles from mammals

I Distinguishes between poisonous and nonpoisonous reptiles

I Defines terms: fungus, fungi

ID Classifies loud and soft sounds

IDR Gives examples of some things in the environment that have changed

ID Recognizes relationships between seasonal changes and changes of temperature

IDR Defines standard unit of measurement

Process Category

INTERPRETING/ANALYZING

DEFINITIONS

Interpreting. Explaining or representing the meaning of an idea, event, quality, object or communication

Analyzing. Breaking down a concept, problem, pattern or whole into its component parts, systematically or sequentially, so that the relation between parts is expressed explicitly

Communication Skills

ID Understands words and ideas when heard in context

IDR Discriminates between auditory similarities and differences in commonly used words in context

ID Discriminates between auditory similarities and differences in commonly used words out of context

ID Differentiates between factual and fictional information

IDR Supplies words which make sense in completing a sentence

IDR Discriminates between same and different sounds in common words (consonants, blends)

IDR Discriminates between differences in vowel sounds (long, short, controlled)

ID Adjusts listening strategies according to the purpose (distinguishes message from noise, suspends judgment, avoids distraction, avoids interrupting)

I Adjusts listening strategies to the nature of the material (topic, density of form and concept difficulty)

I Adjusts listening strategies to the organization cues of the speaker (statement of points, organizational phrases, repetition)

IDR Analyzes and interprets pictures, using elaborated language

ID Interprets punctuation marks correctly in reading orally

IDR Uses phonetic analysis clues and principles to identify new words
- a. beginning and ending consonant sounds
- b. clusters
- c. short and long vowels
- d. multiple sounds of consonants
- e. silent consonants
- f. variant vowel sounds (dipthongs, controlled vowels, digraphs)

IDR Uses structual analysis clues to decode unknown words
- a. word parts (root words, prefixes, suffixes)
- b. compound words
- c. plural forms
- d. contractions
- e. abbreviations
- f. possessive forms
- g. syllabication
- h. accent
- i. pronoun referents

ID Determines meanings by adding prefixes and suffixes to root words

ID Makes comparisons using stated information

IDR Interprets symbols

ID Makes comparisons using implied information

I Recognizes use of propaganda techniques

I Interprets mood, attitude, emotions through body language and voice when reading orally

ID Compares information read to own experience

ID Interprets information presented graphically, such as
- a. maps
- b. graphs
- c. charts
- d. tables
- e. schedules
- f. diagrams

ID Uses dictionaries
- a. to identify word meanings or spelling
- b. to find synonyms
- c. to identify and interpret phonetic respellings to aid pronunciation
- d. to select appropriate meanings of words in context

ID Locates materials in a media center

ID Locates information using a variety of sources
- a. table of contents, page numbers, title page
- b. dictionaries—(guide, entry words, pronunciation key, diacritical markings)
- c. glossaries
- d. indexes—(key words, main and subtopics)
- e. encyclopedia
- f. calendar
- g. library card files (card catalog, periodical files)
- h. catalogs
- i. newspapers
- j. directories
- k. bibliographies
- l. maps
- m. charts, graphs
- n. signs
- o. schedules, tables
- p. time lines
- q. diagrams, labels

I Uses a variety of study techniques, e.g., survey, question, read, recite, review (SQ3R) or preview, question, read, survey test (PQRST)

I Takes notes or makes oral presentation accurately

I Discusses reactions to and perceptions of literature as these are affected by many factors (i.e., attitudes, experience, maturity, knowledge) of both the reader and the writer

I Compares literary works
- a. form
- b. content
- c. aesthetic merit

ID Checks and corrects errors in
- a. capitalization
- b. punctuation
- c. complete sentences
- d. sequence of ideas
- e. spelling

I Interprets basic instructions and labeling information in
  a. recipes
  b. clothing care instructions
  c. warning labels (poison control, electrical hazards)
  d. medicine labels
  e. product contents and nutritional information labels

I Interprets forms, applications and agreements including those relating to money management (at a nontechnical level)
  a. discount coupons
  b. credit cards
  c. banking procedures
  d. payments and loans

I Interprets functional transportation information
  a. routes, schedules and timetables
  b. signs, marquees and billboards
  c. travel brochures

I Differentiates among several classes of communications—intrapersonal, interpersonal and mass

I Analyzes relationships among source, message, medium and audience

I Describes the influences advertising has on personal buying habits

I Differentiates between visual fact (representation) and visual fiction (creation, fabrication)

I Analyzes nonverbal symbols of communication used in television programming and visual advertising

I Describes the effects of geography and environment on the people of a foreign country

I Identifies the meaning of commonly used gestures

I Comprehends meaning of complex word groupings

I Comprehends meaning of single words

I Discriminates between the sound of English and of a foreign language

I Recognizes intonational patterns (commands, questions, statements)

I Responds orally to visual cues

I Responds orally to familiar spoken cues

Mathematics

IDR Orders the whole numbers

ID Uses ordinal numbers

ID Orders several different fractional parts of equivalent units according to size, from smallest to largest, and names the corresponding fraction

ID Identifies and describes everyday situations that require the use of directed whole numbers

ID Orders any given set of rational numbers (whole numbers, fractions, decimals, percents, negative numbers)

ID Gives the prime factorization of any whole number less than or equal to 24

ID Identifies number patterns

ID Selects appropriate operations on whole numbers for a given physical situation or illustrates a given operation by a physical situation

I Gives the prime factorization of any whole number

ID Determines when and how to use the four arithmetic operations

I Factors any given number into its unique product or prime numbers (Fundamental Theorem of Arithmetic)

I Finds factors and multiples of given numbers

I Determines if two ordered number pairs are equivalent to each order by inspection of sets of equivalent number pairs

I Uses different representations of the same number of quantity (including measurement) and translates from one representation to another; for example, ¼ = 0.25

ID Matches mathematical operations with physical representations by
- a. selecting an appropriate mathematical operation for a given physical situation
- b. illustrating with words or pictures a given mathematical operation

ID Uses the symbols +, −, x, ÷, =, ≠, <, >

ID Uses commutative, associative and distributive properties as mental or written computation is developed

ID Uses the special properties of zero and one as mental or written computation is developed

IDR Tells whether a number is even or odd, and tells why

ID Selects the order of arithmetic operations necessary to simplify a mathematical expression or to solve a real-world problem

IDR Makes comparisons by finding similarities and differences between two objects

IDR Uses comparative terms correctly in describing similarities and differences

ID Places objects in order by using a property such as length

IDR Orders two or more given numbers

ID Finds a missing element of a pair when one member of the pair and the relation are given

ID Finds the relation when a set of pairs is given

ID Finds some pairs of elements when a relation is given

I Finds the relation when a set of ordered pairs is given

I Finds a rule (relation) when some pairs of numbers are given and find pairs of numbers when a rule (relation) is given

I Locates points in a Cartesian plane

ID Selects from a collection of geometric figures those which are alike and under the following
- a. rubber sheet geometry
- b. rotation (turn)
- c. reflection (flip)
- d. translation (slide)
- e. uniform stretches and shrinks

ID Identifies the following relations between point sets
- a. inside and outside (for plane curves and space figures)
- b. parallel (for lines)
- c. perpendicular (for lines, planes)
- d. has same size as
- e. has same shape as

I Selects from a given set of geometric figures those which are alike
  a. topologically (rubber sheet geometry)
  b. under uniform stretches and uniform shrinkage
  c. under rotations, reflections and translation

I Identifies shapes that are alike if stretching, shrinking or bending is allowed and cutting or joining is not allowed

I Identifies shapes that are alike under rotations, reflections, or translations

I Identifies relations between point sets or between geometric figures such as parallel, perpendicular, similar and congruent

ID Determines final time reading, given the initial reading and the time interval

IDR Selects coins needed to obtain a given monetary value

ID Makes change in coins by using the additive method

I Selects appropriate units of measurement to determine length, area, volume, perimeter, circumference, angle, time, mass, temperature and capacity

I Selects and uses the appropriate instruments to measure length, mass, angle, temperature and time

I Determines the precision of measurement required for a given situation

I Selects the unit required for precision of measurement for a given situation

ID Sorts out relevant and irrelevant data

ID Tells whether a sample of data represents a population

I Illustrates how sampling may effect interpretation of data

I Distinguishes between biased and unbiased

ID Constructs and interprets graphical representations such as tables, charts, graphs, maps and histograms

ID Reads and interprets diagrams including simple flow charts, tree diagrams, factor trees and Venn diagrams

ID Counts all the possible outcomes of an experiment which has a limited number of outcomes

ID Shows that in some instances one event has a better chance of occurring than another

ID Makes and interprets generalized statements using **all, some, or** and **and**

I Exhibits critical thinking

I Analyzes arguments critically

ID Translates a real world situation into problems that reflect the situation and apply mathematics where appropriate

Creative Arts

ID Describes feelings and moods of works of art

ID Identifies abstract or geometric shapes when present in a longer, more complicated composition

ID Identifies the use of perspective in pictures or drawings

ID Moves rhythmically in own way

ID Establishes own rhythm and develops own dance

ID Associates feeling and mood with music

I Reads music

I Describes the roles music plays in society

ID Describes the contribution of music to
- a. worship
- b. celebration
- c. leisure

Social Studies

ID Arranges in sequence terms which denote time

ID Arranges a series of events in chronological order

I Constructs and interprets
- a. graphs
- b. charts
- c. tables
- d. cartoons

I Recognizes areas for further study

ID States three things that he or she can do well

ID Describes the effect feelings have on self and others

ID Identifies the choices of behavior available in common school situations

IDR Describes the value of friendships

IDR States ways in which each family member is important

IDR Describes the function of the family

ID Lists each family member's responsibilities

ID States uses of the home

IDR States the importance of knowing one's address as insurance against getting lost and as a measure of independence

ID Describes the different types of homes according to needs, geographical location and the way of life of different families

IDR States two reasons why people need food (good health, growth, enjoyment)

IDR States two reasons why people need clothing (protection, warmth, social acceptance)

IDR States two reasons why people need shelter (protection from weather, protection from animals and other outside dangers, a place of family life)

ID States at least two ways in which all people are alike

I Distinguishes one difference in satisfying each basic need according to geographic location

ID Lists five ways to live cooperatively in a community

ID Lists three things he or she can do to bring about a friendlier neighborhood

ID Names manufactured goods which are needed or wanted

ID Differentiates between personal needs and wants

ID Discusses the possible values of attending the social or cultural events available in the local community

ID States the names and describes the customs of various holidays and special days, and tells why we celebrate them—Halloween, Thanksgiving, Christmas, New Year's Day, Valentine's Day, Easter, Mother's Day, Father's Day, Flag Day, Independence Day, Passover

ID Compares how the holidays are celebrated in our schools, our homes and throughout our nation

ID Identifies at least one animal which produces a non-food-related product

IDR Follows school rules

IDR Uses good manners

ID Shows responsibility

ID States that people work in order to provide for personal and family needs and wants

IDR Describes the work school-age children perform

IDR Assumes a role in a mock circus

IDR Uses five terms correctly—acrobat, ringmaster, juggling, high wire, trapeze, big top

ID Uses a variety of maps—physical, political, economic—for information

I Uses the grid system to locate exact position

ID Discusses misuse of land and resources

I Discusses how misuse of land and resources can be prevented

I Lists renewable and non-renewable resources

ID Places ten forms of transportation in chronological order

ID Locates Indian tribes on a map of the United States

IDR Follows oral directions in moving body or objects up, down, forward, backward

IDR Places or moves objects—in, on, beside, above, below, over, under, around, through, as requested

ID Locates main physical features of the state on an outline map

I Places the main events of Georgia's history in chronological order

I Describes the role of the seacoast in Georgia's economic past and future

I Describes three heroes or heroines in Georgia's history

I Discusses the rights and responsibilities of all citizens

I Discusses current events as they pertain to federal government

I Describes in general terms the events leading to the American Revolution

I Places events studied in chronological order

I Describes how customs and values are taught

I Discusses how personal values determine "right" action

IDR Describes three precautions for caring for a bicycle

ID Defines rules as guides for conduct in traffic to ensure the safety of all

ID Explains what it means to be a good defensive driver/rider in traffic—Identify, Predict, Decide and Execute (IPDE)

ID Describes the relationship between safety and personal responsibility

ID Discusses safe ways to use objects commonly found in the home

I Describes procedures to be used if accidents occur at home

I Discusses how and where to get help in case of major injury

Science

ID Describes a conclusion drawn from a variety of observations

I Differentiates between potential energy and kinetic energy

ID Explains the causes of fog, clouds, wind and snow

ID Explains that rain is moisture or water that has evaporated

ID Explains the causes of changes in temperature

ID Explains three uses of rain

I Lists the chemical properties of air and water

I Lists uses of air and water

I Names at least three ways we use the resources of the ocean

I Lists three methods scientists use to investigate

I Demonstrates that the disintegration of rocks to soil is caused by wind, weather, chemical changes and temperature changes

I States at least three reasons for conservation of natural resources

ID Distinguishes between satellites and planets

I Defines gravity and explains how gravity holds the air and water to the earth

I Collects, records and interprets data from experiments

I Explains effects of the sun on the celestial bodies (heat and light)

I Explains the revolution of the earth and other planets around the sun

I Explains sunrise and sunset and the accompanying atmospheric effects

ID Follows directions to set up and conduct experiments

I Lists food preferences of reptiles

I Investigates growth of fungus

IDR Lists the units of measurement

I Takes responsibility for preventing and controlling diseases within self

I Describes the results of improper eating as related to physical well-being

I Assumes responsibility for own health practice

I Demonstrates a sense of responsibility toward others' health

I Applies methods of general body cleanliness and care

Process Category

INFERRING/HYPOTHESIZING/EXPERIMENTING/PREDICTING

DEFINITIONS

Inferring. Drawing a conclusion or deduction from facts, evidence or assumptions based on past experience

Hypothesizing. Proposing a statement as a possible solution to a problem

Experimenting. Trying, testing, verifying a tentative explanation

Predicting. Foretelling or forecasting eventualities by using past experiences or accrued knowledge

Communication Skills

ID Predicts story sequences or endings

ID Infers the following when not specifically stated by the speaker
- a. main ideas
- b. details
- c. sequence
- d. setting

I Experiments with words and learns how word order reveals meaning

ID Uses alternative ways of phrasing ideas

ID Experiments with changes in stress that reveal different meanings

Uses various aids to develop and expand vocabulary
- a. context clues
- b. synonyms, antonyms and homonyms
- c. acronyms
- d. multiple meanings of words
- e. classification (categories, general to specific)

ID Draws conclusions from facts given orally

ID Predicts outcomes

ID Draws conclusions from selections read

ID Makes appropriate generalizations

ID Infers that which is not explicitly stated in a written selection
- a. main ideas
- b. details that support main idea
- c. sequence
- d. cause-effect
- e. setting
- f. characters' traits and motives

ID Infers literal meaning from author's use of figurative language

ID Infers figurative meaning from author's use of literal language

ID Distinguishes reality from fantasy

ID Distinguishes fiction from nonfiction

ID Distinguishes between fact and opinion

I Makes inferences and draws conclusions in reading literature

Mathematics

ID Estimates the weights of materials using specified units

I Estimates weights of objects using metric units

I Estimates weights of objects using English units

IDR Finds by experimenting that changing the size of a container changes its capacity

ID Estimate lengths in specified units

I Estimates measurements with a reasonable degree of accuracy

ID Arranges two or more objects in a number of ways and collects the resulting data

ID Describes some events that are certain to happen and some that are certain not to happen

ID Describes some events which are equally likely to happen and other events which are not likely to happen

ID Selects events that have an equal chance of occurring

ID Selects events that have no chance of happening

ID Specifies the chance of an event's happening

I Assigns or estimates the probability or odds of a chance event

ID Uses observations and data to make predictions

I Uses estimations (i.e., calculates with rounded numbers if the situation can be satisfied with an approximate answer)

I Uses estimation (i.e., calculates with rounded numbers) in written calculations

Creative Arts

I Produces abstract and realistic art forms

ID Explores a variety of music

I Experiments with dynamic levels, tempo, rhythm, melody

ID Explores a variety of instruments

ID Experiments with new, invented and modern notation

Social Studies

ID Formulates hypotheses based on evidence

ID Makes inferences about a situation through observation techniques

I Proposes alternative possibilities for existing realities

I Changes the solution if new data warrants it

ID Discusses the probable reaction to particular behavior

IDR Cares for a garden containing plants commonly grown in the area

ID Makes decision and accepts the consequences of choices

IDR Prepares and tastes two foods associated with a country

I Discusses the values of learning in order to
   a. solve problems
   b. make predictions
   c. make value judgments

Science

ID Infers data from observations

ID Forms hypotheses to solve problems

ID Predicts outcomes from data collected

I Predicts and describes changes in matter

ID Demonstrates that matter has mass and occupies space

ID Demonstrates that force is an action that produces motion

IDR Demonstrates the use of a simple machine

ID Demonstrates that electricity can be used to produce heat and light

ID Demonstrates that a magnetic pull can pass through many substances

ID Demonstrates that electricity flows only when it has a complete path

I Predicts the moon's position over a three month period

I Estimates the size of a dinosaur

ID Demonstrates how the earth travels around the sun

I Illustrates a known law through experimentation (Newton's law of motion)

I Demonstrates how a fungus (pencillin) is grown using stale bread, cheese, fruit

I Demonstrates that heat comes from the sun, fuels, electricity and friction

I Demonstrates that most objects get larger when heated and smaller when cooled

I Demonstrates use of a prism

I Demonstrates how light is reflected in many directions

ID Predicts and describes changes in the environment

I Estimates measurements

Process Category

MEASURING

DEFINITION

Measuring. Determining the amount or degree of a specified property of an element or set of elements by making comparisons to designated units

Mathematics

IDR States the number of units of time in a given interval between two specific events by using improvised time pieces, clocks and calendars

IDR Tells time by using a clock

ID Determines a time interval between two events

ID Finds the weight of an object using both improvised and standard units

I Measures the weights of various objects using metric units

I Measures the weights of various objects using English units

IDR Demonstrates that a given capacity or volume of material does not change even if its shape or position is changed

ID Determines the capacity or volume of a container by counting both the improvised and standard units needed to fill a container

ID Determines capacity or volume by counting improvised units and standard units

ID Determines the area of a region by covering the region and counting improvised and standard units

ID Determines lengths by using improvised and standard units

ID Measures lengths using metric units

ID Measures lengths by using English units

Social Studies

ID Uses the calendar to find special days

I Uses parallels and meridians in determining directions

Science

ID Measures to solve problems

ID Germinates seeds and graphs the growth of seeds and plants

ID Demonstrates the use of a thermometer to observe temperature changes

IDR Measures temperature using a thermometer

IDR Accurately records daily temperatures for a given time span

IDR Quantifies with a variety of measuring instruments

IDR Measures length, weight and/or volume of an object

I Measures a variety of items using basic metric units

Process Category

COMMUNICATING

DEFINITION

Communicating. Receiving, comprehending, transmitting, interchanging information and ideas

Communication Skills

ID Understands a basic oral vocabulary related to his or her environment

IDR Responds appropriately to request or directions

IDR Understands place relationships and directions (on, between, around, near)

ID Understands sentence meaning when pitch, inflection, stress and pause are varied in orally presented sentences

I Uses specialized vocabularies related to topics of study

ID Uses meanings of words
- a. specific meanings
- b. multiple meanings
- c. denotation
- d. connotation

ID Comprehends orally presented materials at different levels of thinking
- a. literal
- b. inferential
- c. evaluative
- d. appreciative

IDR Uses language frequently and with enjoyment

IDR Speaks clearly

IDR Shares ideas and experiences willingly

ID Uses descriptive words and elaborated language

IDR Dictates meaningful information to adults

ID Communicates ideas clearly

IDR Speaks in complete sentences

ID Uses functional vocabulary related to experience

ID Uses standard language patterns

ID Uses conjunctions to join two related sentences

ID Uses singular or plural nouns and verbs correctly

ID Uses verbs indicating past, present or future tense correctly

ID Uses personal pronouns correctly

ID Uses oral language for a variety of purposes
- a. for personal and creative expression
- b. to relate and obtain information
- c. to describe experiences
- d. to communicate feelings

ID Uses oral language in a variety of ways
- a. dialogue and discussions
- b. retelling and paraphrasing
- c. summarizing
- d. interviews

ID Reads orally with expression and fluency

ID Reads and follows printed directions

ID Reads and follows written directions containing three or more steps

ID Reads from a variety of reading materials (magazines, newspapers, child-made books, trade books)

ID Reads various kinds of literature (poetry, biography, fiction, non-fiction, tall tales)

IDR Dictates information for illustrated experience stories

IDR Prints names and other proper words with upper and lower case letters

IDR Uses left to right pattern of writing

IDR Uses reading instruction terms (top of page, left to right progression, beginning and ending of words)

IDR Forms letters and number correctly
- a. size
- b. slant

IDR Writes lower and upper case standard letter forms

IDR Prints or writes with ease and fluency

IDR Communicates ideas clearly and effectively

IDR Uses descriptive words and elaborated language

IDR Writes complete sentences

IDR Capitalizes words and abbreviations correctly

IDR Uses abbreviations correctly

IDR Punctuates sentences and abbreviations correctly

ID Writes and composes for a variety of purposes
- a. for personal communication
- b. to clarify thoughts and ideas
- c. for self-expression and personal satisfaction
- d. to record information (reporting, summarizing, paraphrasing)
- e. entertainment

ID Writes paragraphs containing a series of sentences on one subject

ID Begins paragraph with topic sentence

IDR Indents the first word of a paragraph

ID Writes and composes by combining paragraphs to create larger works (letters, stories, essays, reports)

ID Writes various types of sentences—declarative, interrogative, commands

IDR Writes compound and complex sentences

I Performs commonly used gestures

I Gives examples of folklore such as proverbs, songs, games and tales

I Responds actively to and displays positive involvement in foreign language activities

I Describes individual and cultural differences

I Demonstrates that variations in word order may express and change meaning

I Comprehends the speech of a regional dialect spoken at normal speed (within the vocabulary and structural range of the student)

I Produces orally the significant sounds and intonation patterns of a foreign language

I Produces meaningful utterances in a foreign language

I Uses an active speaking vocabulary (appropriate to the age and ability of the student)

Mathematics

IDR Reads and writes the numerals 0,1,2 . . . 9

IDR Reads and writes number words 0,1,2 . . . 9

ID Uses the place value code in writing two- and three-digit numerals

ID Gives and example of an ordered pair of whole numbers used in a rate context and an ordered pair of whole numbers used in a fraction context

IDR Shows immediate verbal recall of
- a. any of the basic addition and subtraction facts
- b. any of the basic multiplication and division facts through 50

IDR Writes the set of prime numbers less than or equal to 50

ID Pictures or records relations
- a. by using objects
- b. by using diagrams or mapping
- c. by using tables and graphs

ID Uses vocabulary indicating spatial relationships

I Reads and makes scale drawings

ID Uses vocabulary in comparing and ordering two or more objects (larger, shortest, etc.)

IDR Records amounts of money using the cent symbol and the dollar symbol with a decimal

ID Collects data in different ways

ID Uses physical objects and pictures to read data

I Computes efficiently—without a calculator—using
- a. whole numbers
- b. fractions
- c. decimals
- d. percents
- e. negative numbers

I Computes efficiently—with a calculator—using
- a. whole numbers
- b. fractions
- c. decimals
- d. percents
- e. negative numbers

Creative Arts

IDR Uses a variety of art media

IDR Uses art media appropriately

IDR Selects the appropriate tools to accomplish certain tasks

IDR Cares for materials properly

I Uses both placement and size variation in showing perspective

IDR Uses ground lines

ID Expresses ideas through actions and words

ID Uses a variety of props and costumes appropriately

ID Plans sequence and assumes role

ID Summarizes information from other content areas dramatically

ID Pantomimes familiar actions

ID Acts out familiar action with dialogue

ID Assumes role in familiar rhymes or stories

ID Adjusts body movements to the accompaniment of regular beat

ID Adjusts body movements to accompaniment which involves contrasts

ID Moves to express mood, elements and basic contrasts in music

I Sings on pitch

I Sings with good tone quality

I Writes music

ID Gives examples of the baisc elements
- a. melody
- b. harmony
- c. tone color
- d. rhythm
- e. tempo

I Listens to and sings music representing a wide variety of periods and styles

IDR Plays simple beat or tune

ID Spontaneously sings

I Creates songs

ID Uses musical terminology and symbols

ID Listens to music for pleasure and enjoyment

ID Expresses a positive attitude toward music

ID participates willingly in musical activities

ID Enjoys singing

ID Performs music for pleasure and enjoyment

Social Studies

ID Recognizes and states a problem

ID Selects effective methods of communicating questions

ID Locates and works with information from a variety of sources (books, atlases, periodicals, newspapers and other media that are increasingly abstract)

ID Organizes information in a usable form

ID Demonstrates three feelings (sadness, happiness, anger, fear)

ID Constructs a map to indicate main points of interest in a community

ID Discusses various community programs, events and places of interest

ID Describes special events

ID Discusses use of different physical features

ID Demonstrates conservation awareness by not wasting paper, by turning off lights and the like

ID Describes two ways he or she can help conserve resources at home and at school

IDR Produces at least one art work which is representative of the culture studied

ID Compiles a scrapbook containing map, flag, location and size, population, climate, religions, capital city, government, main occupations, transportation, main products, natural resources, education, facts of interest

IDR Speaks five simple phrases in a foreign language such as "good morning," "My name is_____."

ID Draws maps of familiar locations (within school, in community, in state)

ID Draws pictures to explain geographical terms

ID Draws the topography of the state

IDR Develops materials to interest class members in visiting the country selected

ID Collects and presents data in the form of charts, pictures, graphs, written narrations and dramatizations

I Maps the various exploration, trade and settlement routes

ID Draws the eight basic sign shapes

ID Performs bicycle hand signals

ID Demonstrates procedures for reporting fires

Science

ID Accurately describes an experience

ID States three basic requirements of life

ID Describes the combination of different types of matter to make useful materials

ID Describes the effect of heat on matter

ID Explains how energy is required to produce changes in matter

ID States five uses of simple machines

I Names three types of magnets

ID Describes characteristics of the ocean floor

ID Describes the moon as the earth's natural satellite

I States the freezing and boiling points of water

I Explains how and why dinosaurs became extinct

ID Describes dinosaurs

ID Describes the exploitation of the oceans' resources by man

I Describes the work of an oceanographer

ID States how much of the earth's surface is covered by water

ID Names the two astronauts on the space shuttle Columbia

ID Discusses the mission of the shuttle Columbia

I Discusses the possible risks of flying the first mission of an untried spaceship

ID Names the planned landing site of the shuttle

I Names five scientists

ID Describes the work of a scientist

I Defines science

I Discusses contributions scientists have made to improve lifestyle

I Defines fossils and explains their origin

I Explains how rocks are formed and changed by the action of heat and pressure

I Illustrates the concept of erosion

ID Explains the earth's rotation on its axis

ID Explains uses of manmade satellites

I Realizes that nothing happens without cause

I Illustrates position of planets in space

I Discusses the possible need to control or destroy some insects

I Describes characteristics of reptiles

I Explains the amphibious life of reptiles

I Describes how fungi are used by humans

ID Names various kinds of sounds

I Explains uses of penicillin

IDR Explains developmental changes in an organism (eggs-tadpole-frog)

I Explains how extreme temperatures can adversely affect our environment

IDR Reads a thermometer

ID Describes butterflies as insects

I Explains the metamorphosis of the butterfly (larva-pupa-adult)

I Explains the apparent brightness of a star (distance from earth, size, temperature)

ID Describes the sun as a star

ID Explains the use of a telescope in viewing stars

I Explains the work of astronomers

I Defines constellations and identifies North Star (Polaris)

I Names the five layers of the atmosphere

I Explains the purpose of the atmosphere

I Lists three characteristics of the atmospheric layer in which we live

I Names atmospheric layer in which we live

IDR Describes the work of a meteorologist

IDR Names three instruments used by meteorologists to measure weather

ID Discusses the importance of adult supervision in taking medicines or other substances

ID Discusses the importance of not eating or drinking substances obtained from strangers

ID Explains that the use of tobacco may bring about health problems

I States that lung cancer and other chronic diseases are found more frequently among smokers

I Explains that alcohol affects the body in many ways

I States that drugs affect individuals in different ways

ID Names some drugs that can be dangerous if misused

I Describes the possible causes of specific communicable diseases

I Describes the possible effects of specific diseases

I Describes methods for preventing specific communicable diseases

I Describes the role that public and private health agencies play in disease prevention

I Describes good and poor health habits

I States that many diseases may be cured through early treatment

I Describes the environmental factors which affect health in a community (pollution)

I Describes the individual's role in disposing of litter

I States that every community must provide facilities for sanitation

I Describes how sanitary conditions are maintained in the community

I Discusses practices which aid growth and development

ID Describes the relationship of good nutrition, adequate sleep and physical activity to the body's growth and development

ID Explains how eating habits can influence body processes in both negative and positive ways

I Describes the basic principles of meal planning

ID States the importance of a good breakfast as it relates to energy level and productivity throughout the day

I Discusses proper care of foods to increase nutritional value and prevent illness

I Discusses the problems of obesity at various age levels

I Describes roles and responsibilities of family members in health care

ID Describes the helplessness of infants and their need of proper care

I Discusses the dangers of self-treatment

I Explains the danger of riding with others whose ability has been impaired by alcohol or other drugs

I States that growth is affected by food, rest, exercise and sleep

ID Describes how safe behavior can reduce the possibility of accidents, injury or death

I Discusses the care and protecting of body parts and sensory organs

I Discusses body systems
- a. structure
- b. function

Describes the general process of maturation from infancy to adulthood

ID States the need for general body cleanliness and care

I Describes the methods used for general body cleanliness and care

I Discusses the need for regular physical check-ups

I Describes opportunities for careers in the health field

IDR Visits a dentist's office

IDR Demonstrates the correct method of brushing teeth

ID Describes careers associated with dentistry

Process Category

SYNTHESIZING/FORMULATING MODELS

DEFINITIONS

Synthesizing. Putting together elements by arranging and combining to form a structure, pattern or product

Formulating Models. Forming elements or ideas into a structure that can be expressed through words, symbols or visual representations

Communication Skills

IDR Discriminates and uses rhyming words

I Identifies questions to be answered before reading and writing summary statements

ID Outlines ideas to aid comprehension and recall

ID Summarizes ideas to aid comprehension and recall

ID Synthesizes ideas to aid in comprehension and recall

I Describes the complexity of individuals and situations as depicted in literature

IDR Attempts self-expression in writing using individualized spellings

ID Uses logical sequence

I Composes various types of literature
- a. stories
- b. poetry
- c. plays
- d. biographies
- e. tales and myths
- f. news articles

ID Writes creatively by
- a. rewriting a story
- b. elaborating on details or elements of stories
- c. changing perspective (point of view)
- d. projecting human traits to inanimate objects
- e. describing the impossible
- f. offering alternative solutions
- g. creating stories from a given theme

Mathematics

ID Discovers and extends some number patterns

ID Completes number patterns

IDR Counts by twos, threes, and so on as well as by 10s and 100s, starting at different numbers

I Generates a finite number of members of the set of equivalent fractions to which a given fraction belongs

I Collects and organizes data

Creative Arts

ID Produces original and imaginative works of art

ID Generates ideas for work of art

Social Studies

ID Uses small objects to represent large ones

ID Devises map symbols and legends for maps

IDR Builds a telegraph

IDR Develops a code for communicating with friends

IDR Invents a new form of communication

Science

ID Sets up experiments in order to solve problems

ID Constructs a simple machine

I Constructs a compass and demonstrates its use

I Makes a model of the solar system

Process Category

EVALUATING

DEFINITIONS

Evaluating. Making a judgment regarding quantity or quality on the basis of a set of criteria

Communication Skills

ID Recognizes relevance or irrelevance of data

ID Makes judgments

I Adjusts reading technique and rate according to the difficulty of material and purposes for reading
- a. rereading
- b. skimming
- c. scanning

I Individually determines worth, desirability and acceptability of various pieces of literature

I Assesses the probable reliability of a variety of messages and their sources

I Describes the influence of advertising on editorial tone and stance

I Evaluates a foreign culture objectively on its own merits rather than from the viewpoint of the North American culture

ID Evaluates the accuracy of the reporting of an experience

Mathematics

ID Judges reasonableness of answers

I Recognizes common errors in reasoning

Creative Arts

ID Delights in natural and manmade art

ID Describes aesthetic objects in the environment

Social Studies

ID Evaluates subjective and objective material distinguishing among fact, inferences based on fact, fiction and opinion

I Determines reliable and questionable materials

ID Uses rational criteria for making evaluations

I Chooses a reasonable solution to a problem after applying the evidence to the various alternatives

I States reasons for advocated position

I Lists two personal values and what results from them

Process Category

INTERACTING

DEFINITIONS

Interacting. Acting on, between and among people and their environment

Communication Skills

ID Uses a variety of dialects

I Accepts and understands other dialects

I Discusses the customs, culture and values of the people described in material read

I Describes the primary functions of mass media (information, persuasion, entertainment)

I Discusses the effectiveness of the mass media in informing, persuading, and entertaining the public

I Describes how mass media depiction of standards of living affects contemporary living standards

I Accepts individual and cultural differences

I Displays an interest in communicating with people of another culture

Creative Arts

IDR Produces works that communicate thoughts and feelings to others

ID Works with others in dramatizing a story

Social Studies

ID Interviews persons associated with an event

IDR Demonstrates honesty and kindness

ID Shares and plays fairly

ID Helps others

IDR Assumes a role in portraying the first Thanksgiving Day

ID Presents information of interest to prospective tourists—costs, accommodations, places of interest to visit

ID Presents information on a person researched in an informative, interesting and concise manner

APPENDIX D
COGNITIVE DOMAIN OBJECTIVES FOR PLANNING

Key
I - Introduce
D - Develop
R - Reinforce

COMMUNICATION SKILLS

TOPIC		CONCEPT/SKILL
Listening Skills	ID	Shows an interest in hearing materials read
	IDR	Actively listens in verbal activities
	IDR	Has adequate attention span for most classroom activities
	ID	Understands words and ideas when heard in context
	IDR	Discriminates between auditory similarities and differences in commonly used words in context
	ID	Discriminates between auditory similarities and differences in commonly used words out of context
	ID	Uses a basic vocabulary related to his or her environment
	IDR	Responds appropriately to requests or directions
	IDR	Understands place relationships and directions (on, between, around, etc.)
	IDR	Recognizes and discriminates between common sounds and sound signals in his or her environment
	IDR	Recalls the following when specifically stated by the speaker a. main ideas b. details c. sequence of events d. cause-effect e. setting f. characters g. feelings h. conclusion
	ID	Predicts story sequences or endings
	ID	Differentiates between factual and fictional information
	IDR	Supplies words which make sense in completing a sentence
	IDR	Discriminates between same and different sounds in common words (consonants, blends)
	IDR	Hears differences in words (ride, rides)

IDR Identifies and uses rhyming words

IDR Discriminates between differences in vowel sounds (long, short, controlled)

ID Understands sentence meaning when pitch, inflection, stress and pause are varied in orally presented sentences

I Uses specialized vocabularies related to topics of study

ID Uses meanings of words
- a. specific meanings
- b. multiple meanings
- c. denotation
- d. connotation

IDR Identifies the number of sound units in spoken words

I Identifies
- a. figurative language
- b. idiomatic expressions
- c. colloquial terms
- d. allusions
- e. point of view
- f. slang

ID Compares and contrasts information given orally

ID Infers the following when not specifically stated by the speaker
- a. main ideas
- b. details
- c. sequence
- d. setting

ID Adjusts listening strategies according to the purpose (distinguishes message from noise, suspends judgment, avoids distraction, avoid interrupting)

I Adjusts listening strategies to the nature of the material (topic, density of form and concept difficulty)

I Adjusts listening strategies to the organization cues of the speaker (statement of points, organization phrases, repetition)

ID Comprehends orally presented materials at different levels of thinking
- a. literal
- b. inferential
- c. evaluative
- d. appreciative

TOPIC		CONCEPT/SKILL
Oral Communication	IDR	Uses language frequently and with enjoyment
	IDR	Speaks clearly
	IDR	Shares ideas and experiences willingly
	ID	Uses descriptive words and elaborated language
	IDR	Analyzes and interprets pictures, using elaborated language
	IDR	Dictates meaningful information to adults
	ID	Communicates ideas clearly
	IDR	Repeats auditory sequences of letters, numbers, words
	ID	Uses logical sequence in presenting ideas
	IDR	Speaks in complete sentences
	ID	Uses functional vocabulary related to experience
	ID	Uses standard language patterns
	ID	Uses conjunctions to join two related sentences
	ID	Uses singular or plural nouns and verbs correctly
	ID	Uses verbs indicating past, present or future tense correctly
	ID	Uses personal pronouns correctly
	I	Experiments with words and learns how word order reveals meaning
	ID	Uses alternative ways of phrasing ideas
	ID	Uses a variety of dialects
	ID	Identifies a variety of dialects
	I	Accepts and understands other dialects
	ID	Uses oral language for a variety of purposes a. for personal and creative expression b. to relate and obtain information c. to describe experiences d. to communicate feelings
	ID	Uses oral language in a variety of ways a. dialogue and discussions b. retelling and paraphrasing c. summarizing d. interviews
	ID	Reads orally with expression and fluency
	ID	Interprets punctuation marks correctly in reading orally
	ID	Experiments with changes in stress that reveal different meanings

TOPIC		CONCEPT/SKILL
Reading		
Word Recognition	IDR	Recognizes and uses sight vocabulary from a. own vocabulary b. high-frequency word lists c. basal readers d. words specific to content areas
	IDR	Identifies individual letters of words
	IDR	Matches beginning and ending sounds of words to appropriate letters of the alphabet (consonants, blends)
	IDR	Matches the sounds of vowels (long, short, controlled) presented in words orally with the symbols representing the sounds
	IDR	Supplies words which contain a given vowel or consonant
	IDR	Supplies words which rhyme with a given word
	IDR	Uses phonetic analysis clues and principles to identify new words a. beginning and ending consonant sounds b. clusters c. short and long vowels d. multiple sounds of consonants e. silent consonants f. variant vowel sounds (dipthongs, controlled vowels, digraphs)
	IDR	Uses structural analysis clues to decode unknown words a. word parts (root words, prefixes, suffixes) b. compound words c. plural forms d. contractions e. abbreviations f. possessive forms g. syllabication h. accents i. pronoun referents
	ID	Determines meanings by adding prefixes and suffixes to root words
	IDR	Interprets symbols
	ID	Uses various aids to develop and expand vocabulary a. context clues b. synonyms, antonyms and homonyms c. acronyms d. multiple meanings of words e. classification (categories, general to specific)
	ID	Classifies words from general to specific (animal, dog, collie)
Comprehension	ID	Reads and follows printed directions
	ID	Identifies the following from selections read by student

a. the main ideas
b. details
c. sequence
d. cause-effect relationships
e. setting
f. characters
g. problems and conclusions

ID Makes comparisons using stated information

ID Draws conclusions from facts given orally

ID Predicts outcomes

ID Draws conclusions from selections read

ID Recognizes relevance or irrelevance of data

ID Makes appropriate generalizations

ID Makes judgments

ID Infers that which is not explicitly stated in a written selection
a. main ideas
b. details that support main ideas
c. sequence
d. cause-effect
e. setting
f. character's traits and motives

ID Infers literal meaning from author's use of figurative language

ID Infers figurative meaning from author's use of literal language

ID Makes comparisons using implied information

ID Distinguishes reality from fantasy

ID Distinguishes fiction from non-fiction

ID Distinguishes between fact and opinion

I Recognizes use of propaganda techniques

I Interprets mood, attitude, emotions through body language and voice when reading orally

ID Compares information read to own experience

ID Interprets information presented graphically, such as
a. maps
b. graphs
c. charts
d. tables
e. schedules
f. diagrams

Study Skills

IDR Demonstrates knowledge of alphabetic sequence

ID Alphabetizes words up to the third letter

ID Locates materials in a media center

ID Uses dictionaries

a. to identify word meanings or spelling
b. to find synonyms
c. to identify and interpret phonetic respellings to aid pronunciation
d. to select appropriate meanings of words in context

ID Reads and follows written directions containing three or more steps

I Identifies questions to be answered before reading and writing summary statements

ID Locates information using a variety of sources
a. table of contents, page numbers, title page
b. dictionaries—guide, entry words, pronunciation key, diacritical markings
c. glossaries
d. indexes—key words, main and subtopics
e. encyclopedia
f. calendar
g. library card files—card catalogs, periodical files
h. catalogs
i. newspapers
j. directories
k. bibliographies
l. maps
m. charts, graphs
n. signs
o. schedules, tables
p. time lines
q. diagrams, labels

ID Outlines ideas to aid comprehension and recall

ID Summarizes ideas to aid comprehension and recall

ID Synthesizes ideas to aid in comprehension and recall

I Adjusts reading techniques and rate according to the difficulty of material and purposes for reading
a. rereading
b. skimming
c. scanning

ID Organizes outline using Roman numerals and letters, main topics and subtopics

I Uses a variety of study techniques, e.g., survey, question, read, recite, review (SQ3R) or preview, question, read, survey, test (PQRST)

I Takes notes of oral presentation accurately

Literature

ID Reads from a variety of reading materials (magazines, newspapers, child-made books, trade books)

ID Reads various kinds of literature (poetry, biography, fiction, non-fiction, tall tales, etc.)

I Makes inferences and draws conclusions in reading literature

- I Identifies a variety of literary external structures: (poetry, prose, fiction, nonfiction, drama)
- I Recognizes literary forms (fables, myths, tales, short stories)
- I Identifies types of literature—tragedy and comedy
- I Identifies the purpose of a variety of literature
  - a. artistic expression
  - b. recording events, ideas and values of diverse societies and cultures (past through the present)
  - c. entertainment and diversion
  - d. extension of individual knowledge and experience
  - e. comparing values, beliefs and behavior
- I Discusses reactions to and perceptions of literature as these are affected by many factors (attitudes, experience, maturity, knowledge) of both the reader and the writer
- I Describes the complexity of individuals and situations as depicted in literature
- I Discusses the customs, culture and values of the people described in material read
- I Compares literary works
  - a. form
  - b. content
  - c. aesthetic merit
- I Individually determines worth, desirability and acceptability of various pieces of literature

TOPIC		CONCEPT/SKILL
Written Communication		
Readiness	IDR	Demonstrates interest in a variety of written material
	IDR	Dictates information for illustrated experience stories
	IDR	Copies simple shapes, designs, letters
	IDR	Recalls shapes, words, letters when given a visual cue
	IDR	Prints names and other meaningful words with upper and lower case letters
	IDR	Uses left to right pattern of writing
	IDR	Uses reading instruction terms (top of page, left to right progression, beginning-ending of words)
	IDR	Attempts written self-expression using individualized spellings
Handwriting	IDR	Sits erect and comfortably at table
	IDR	Holds writing instrument correctly
	IDR	Positions paper correctly
	IDR	Spaces letters and words correctly
	IDR	Writes lower and upper case standard letter forms
	IDR	Forms letters and numbers correctly a. size b. slant
	IDR	Prints or writes with ease and fluency
Composition	IDR	Communicates ideas clearly and effectively
	IDR	Uses descriptive words and elaborated language
	IDR	Writes complete sentences
	IDR	Capitalizes words and abbreviations correctly
	IDR	Uses abbreviations correctly
	IDR	Punctuates sentences and abbreviations correctly
	ID	Uses standard language patterns
	IDR	Uses conjunctions to join two related sentences
	IDR	Uses singular or plural nouns and verbs correctly
	IDR	Uses verbs indicating past, present or future tense correctly
	IDR	Uses personal pronouns correctly
	ID	Uses logical sequence
	ID	Writes and composes for a variety of purposes a. for personal communication b. to clarify thoughts and ideas c. for self-expression and personal satisfaction d. to record information (reporting, summarizing, paraphrasing) e. entertainment

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ID Writes paragraphs containing a series of sentences on one subject

ID Begins paragraph with topic sentence

IDR Indents the first word of a paragraph

ID Writes and composes by combining paragraphs to create larger works (letters, stories, essays, reports)

I Composes various types of literature
- a. stories
- b. poetry
- c. plays
- d. biographies
- e. tales and myths
- f. news articles

ID Identifies nouns, noun determiners, verbs, personal pronouns, adjectives, adverbs

ID Identifies various types of sentences—declarative, interrogative, commands

ID Writes various types of sentences: declarative, interrogative, commands

IDR Writes compound and complex sentences

ID Checks and corrects errors in
- a. capitalization
- b. punctuation
- c. complete sentences
- d. sequence of ideas
- e. spelling

ID Writes creatively by
- a. rewriting a story
- b. elaborating on details or elements of stories
- c. changing perspective (point of view)
- d. projecting human traits to inanimate objects
- e. describing the impossible
- f. offering alternative solutions
- g. creating stories from a given theme

Spelling

ID Spells words correctly
- a. words with regular consonant sounds
- b. words containing blends
- c. words containing long vowels
- d. words containing short vowels
- e. words containing silent consonants
- f. words containing irregular vowel sounds
- g. words containing unexpected spelling
- h. contractions
- i. words with prefixes and suffixes
- j. days of the week, months of the year, holidays, proper names
- k. abbreviations

Functional Reading and Mass Communication Skills

I Interprets basic instructions and labeling information in
- a. recipes
- b. clothing care instructions
- c. warning labels (poison, controls, electrical hazards)
- d. medicine labels
- e. product contents and nutritional information labels

I Interprets forms, applications and agreements, including those relating to money management (at a nontechnical level)
- a. discount coupons
- b. credit cards
- c. banking procedures
- d. payments and loans

I Interprets functional transportation information
- a. routes, schedules and timetables
- b. signs, marquees and billboards
- c. travel brochures

I Differentiates among several classes of communications—intrapersonal, interpersonal and mass communications

I Names four essentials of the communication process—source, message, medium, audience

I Analyzes relationships between source, message, medium and audience

I Identifies primary communication vehicles comprising American mass media

I Describes the primary functions of mass media (information, persuasion, entertainment)

I Discusses the effectiveness of the mass media in informing, persuading, and entertaining the public

I Describes how mass media depiction of standards of living affects contemporary living standards

I Describes the influence of advertising on personal buying habits

I Assesses the probable reliability of a variety of messages and their sources

I Identifies propaganda devices of mass media (glittering generality, card stacking, name calling, testimonial, bandwagon, elitism)

I Differentiates between visual fact (representation) and visual fiction (creation, fabrication)

I Identifies visual stereotypes in film and television including hero and heroine, villain, man, woman, child, family, professional groups, ethnic groups

I Analyzes nonverbal symbols of communication used in television programming and visual advertising

I Describes the influence of advertising on editorial tone and stance

TOPIC		CONCEPT/SKILL
Foreign Language		
Culture	I	Identifies countries and regions where a different language is spoken
	I	Identifies customs and contemporary cultural patterns related to a. food b. clothing c. family life d. etiquette e. work and leisure activities f. education g. religion
	I	Describes the effects of geography and environment on the people of a foreign country
	I	Identifies the meaning of commonly used gestures
	I	Performs commonly used gestures
	I	Gives examples of folklore such as proverbs, songs, games and tales
	I	Evaluates a foreign culture objectively on its own merits rather than from the viewpoint of the North American culture
Attitudes, Interests, and Values	I	Is receptive to the study of a foreign language, culture and civilization
	I	Participates willingly in the study of a foreign language, culture and civilization
	I	Responds actively to and displays positive involvement in foreign language activities
	I	Describes individual and cultural differences
	I	Accepts individual and cultural differences
	I	Displays an interest in communicating with people of another culture
	I	Derives genuine enjoyment from using the language skills and cultural knowledge being acquired
Listening	I	Discriminates between the sounds of English and those of the foreign language
	I	Differentiates among the sounds of foreign language
	I	Comprehends meaning of single words
	I	Comprehends meaning of complex word groupings
	I	Recognizes intonational patterns (commands, questions, statements)
	I	Demonstrates that variations in word order may express and change meaning

TOPIC		CONCEPT/SKILL
	I	Comprehends the speech of a regional dialect spoken at normal speed (within the vocabulary and structural range of the student)
Speaking	I	Produces orally the significant sounds and intonation patterns of a foreign language
	I	Produces meaningful utterances in a foreign language
	I	Responds orally to visual cues
	I	Responds orally to familiar spoken cues
	I	Uses an active speaking vocabulary (appropriate to the age and ability of the student)

TOPIC		CONCEPT/SKILL
Visual Arts	IDR	Uses a variety of art media
	IDR	Uses art media appropriately
	IDR	Selects the appropriate tools to accomplish certain tasks
	IDR	Cares for materials properly
	ID	Produces original and imaginative works of art
	ID	Delights in natural and manmade art
	ID	Describes aesthetic objects in the environment
	IDR	Describes the content of artworks
	ID	Describes feelings and moods of works of art
	ID	Generates ideas for works of art
	IDR	Recognizes basic geometric shapes
	ID	Identifies abstract or geometric shapes when present in a longer, more complicated composition
	ID	Identifies the use of perspective in pictures or drawings
	I	Uses both placement and size variation in showing perspective
	ID	Identifies patterns
	IDR	Uses ground lines
	ID	Identifies major points of interest, foreground and background
	I	Reads about art
	IDR	Produces works that communicate thoughts and feelings to others
	I	Produces abstract and realistic art forms
	I	Identifies well-known works of art
	I	Names the artists who produced specific works of art
	I	Describes a variety of careers in art

DRAMA

TOPIC		CONCEPT/SKILL
Dramatic Play	ID	Expresses ideas through actions and words
	ID	Uses a variety of props and costumes appropriately
	ID	Plans sequence and assumes role
	ID	Summarizes information dramatically from other content areas
Creative Dramatics	ID	Pantomimes familiar actions
	ID	Acts out familiar actions with dialogue
	ID	Assumes roles in familiar rhymes or stories
	ID	Dramatizes sequences of action in story
	ID	Works with others in dramatizing story

DANCE

TOPIC		CONCEPT/SKILL
Performance	ID	Moves rhythmically in own way
	ID	Adjusts body movements to the accompaniment of regular beat
	ID	Adjusts body movements to accompaniment which involves contrasts
	ID	Establishes own rhythm and develops own dance
Knowledge	ID	Develops an appreciation for creative folk, fad, social and modern dance

MUSIC

TOPIC		CONCEPT/SKILL
Listening	ID	Explores a variety of music
	ID	Associates feeling and mood with music
	I	Identifies different notes
	ID	Identifies the basic elements of music a. melody b. harmony c. tone color d. rhythm e. tempo
	ID	Describes the form of a variety of musical selections
	I	Defines form in music
	I	Identifies a variety of styles and types of music

Performance	ID	Moves to express mood, elements and basic contrasts in music
	I	Sings on pitch
	I	Sings with good tone quality
	I	Reads music
	I	Experiments with dynamic levels, tempo, rhythm, melody
	I	Writes music
	ID	Gives examples of the basic elements a. melody b. harmony c. tone color d. rhythm e. tempo
	I	Listens to and sings music representing a wide variety of periods and styles
	ID	Explores a variety of instruments
	IDR	Plays simple beat or tune
	ID	Spontaneously sings
	I	Creates songs
Knowledge	I	Identifies musical terminology and symbols
	ID	Uses musical terminology and symbols
	ID	Recognizes and names musical instruments
	ID	Identifies variations in a. form b. tempo c. dynamics d. beat e. meter f. rhythm
	ID	Experiments with new, invented and modern notation
	I	Describes the roles music plays in society
	ID	Identifies a repertoire of well-known compositions
	ID	Supplies biographical facts about composers
Appreciation	ID	Listens to music for pleasure and enjoyment
	ID	Expresses a positive attitude toward music
	ID	Participates willingly in musical activities
	ID	Enjoys singing
	ID	Performs music for pleasure and enjoyment
	ID	Describes the contribution of music to a. worship b. celebration c. leisure
	I	Describes a variety of careers in music

TOPIC		CONCEPT/SKILL
Sets, Numbers and Numeration	IDR	Places two sets in one-to-one correspondence
	IDR	Identifies collections of objects as sets
	ID	Selects subsets of a given set
	IDR	Assigns the cardinal number to a set
	IDR	Assigns whole number names to sets of objects
	IDR	Orders the whole numbers
	IDR	Puts in one-to-one correspondence the ordered set of whole numbers and points on a line
	IDR	Reads and writes the numerals 0,1,2 . . 9
	IDR	Reads and writes number words 0,1,2 . . 9
	ID	Uses the place value code in writing two- and three-digit numerals
	ID	Uses ordinal numbers
	ID	Names the ordered pair of whole numbers associated with fractional parts of units and sets
	ID	Orders several different fractional parts of equivalent units according to size, from smallest to largest, and names the corresponding fraction
	ID	Gives an example of an ordered pair of whole numbers used in a rate context and an ordered pair of whole numbers used in a fraction context
	ID	Shows that two or more different number pairs or fractions may be associated with equivalent fractional parts
	ID	Identifies and describes everyday situations that require the use of directed whole numbers
	ID	Tabulates and describes sets
	ID	Selects from a given set the subsets having a specified common property
	ID	Identifies common properties of a given set
	I	Discriminates between an ordered pair of whole numbers used in a rate context and an ordered pair of whole numbers used in a fraction context
	I	Generates a finite number of members of the set of equivalent fractions to which a given fraction belongs
	I	Determines if two ordered number pairs are equivalent to each order by inspection of sets of equivalent number pairs
	ID	Classifies elements of a set according to common characteristics

ID Orders any given set of rational numbers (whole numbers, fractions, decimals, percents, negative numbers)

I Uses different representations of the same number of quantity (including measurement) and translates from one representation to another; for example, ¼ = 0.25

Operations, Their Properties and Number Theory

ID Matches mathematical operations with physical representations by

a. selecting an appropriate mathematical operation for a given physical situation
b. illustrating, with works or pictures, a given mathematical operation

ID Uses the symbols +, ÷, ×, −, =, <, > correctly when writing number sentences

IDR Writes a subtraction sentence related to a given addition sentence

ID Writes a division sentence related to a given multiplication sentence excluding division by zero

ID Uses commutative, associative and distributive properties as mental or written computation is developed

ID Uses the special properties of zero and one as mental or written computation is developed

IDR Tells whether a number is even or odd, and tells why

IDR Writes the set of prime numbers less than or equal to 50

ID Gives the prime factorization of any whole number less than or equal to 24

ID Discovers and extends some number patterns

IDR Shows immediate verbal recall of

a. any of the basic addition and subtraction facts
b. any of the basic multiplication and division facts through 50

IDR Counts by twos, threes, etc., as well as by 10s, and 100s, starting at different numbers

ID Selects appropriate operations on whole numbers for a given physical situation or illustrates a given operation by a physical situation

ID Discusses the properties of odd and even numbers

ID Identifies odd and even numbers

I Identifies prime and composite numbers

I Gives the prime factorization of any whole number

ID Identifies number patterns

ID Completes number patterns

ID Shows immediate verbal recall of basic facts

ID Finds the sum, product, difference and quotient for
- a. any two whole numbers, if a difference or a quotient exists
- b. any two rational numbers, if a quotient exists

ID Determines when and how to use the four arithmetic operations

I Factors any given number into its unique product or prime numbers (Fundamental Theorem of Arithmetic)

I Identifies prime numbers

I Finds factors and multiples of given numbers

ID Applies the distributive property of multiplication over addition without necessarily identifying the term distributive

ID Applies the associative and commutative properties of addition and multiplication without necessarily identifying the terms associative and commutative

ID Selects the order of arithmetic operations necessary to simplify a mathematical expression or to solve a real-world problem

Relations and Functions

IDR Makes comparisons by finding similarities and differences between two objects.

IDR Uses comparative terms correctly in describing similarities and differences

ID Sorts objects or symbols using
- a. nonnumerical relations
- b. numerical relations

ID Places objects in order by using a property such as length

ID Demonstrates correspondences such as
- a. one-to-one
- b. one-to-many
- c. many-to-one
- d. many-to-many

ID Illustrates the three basic numerical relations of greater than, less than or as many as (equal to)

IDR Orders two or more given numbers

ID Finds the missing element of a pair when one member of the pair and the relation are given

ID Finds the relation when a set of pairs is given

ID Finds some pairs of elements when a relation is given

ID Pictures or records relations
- a. by using objects
- b. by using diagrams or mappings
- c. by using tables and graphs

ID Classifies elements of a set according to specified properties

I Applies equivalent relations to elements such as fractions, ratios and geometric figures

I Finds the missing element of a pair when one member of the pair and the relation are given

I Finds some pairs of elements when a relation is given

I Finds the relation when a set of ordered pairs is given

I Identifies one-to-one, one-to-many correspondences

I Finds a rule (relation) when some pairs of numbers are given and find pairs of numbers when a rule (relation) is given

I Locates points in a Cartesian plane

Geometry

ID Uses vocabulary indicating spatial relationships

IDR Identifies common two- and three-dimensional geometric shapes

ID Selects from a collection of geometric figures those which are alike under the following
- a. rubber sheet geometry
- b. rotation (turn)
- c. reflection (flip)
- d. translation (slide)
- e. uniform stretches and shrinks

ID Identifies the following relations between point sets
- a. inside and outside (for plane curves and space figures)
- b. parallel (for lines)
- c. perpendicular (for lines, planes)
- d. has same size as
- e. has same shape as

ID Counts the number of units in a given collection of units arranged in different configurations

ID Determines by sight which of two given angles is larger or smaller

I Selects from a given set of geometric figures those which are alike
- a. topologically (rubber sheet geometry)
- b. under uniform stretches and uniform shrinkage
- c. under rotations, reflections and translations

I Identifies sets of points including points, lines, planes, three-dimensional figures, line segments, open curves, closed curves, angles, triangles, rectangles, squares and circles

I Classifies sets of points including points, lines, planes, three dimensional figures, line segments, open curves, closed curves, angles, triangles, rectangles, squares, and circles

I Identifies shapes that are alike if stretching, shrinking or bending is allowed and cutting or joining is not allowed

I Identifies shapes that are alike under rotations, reflections or translations

I Identifies relations between point sets or between geometric figures such as parallel, perpendicular, similar and congruent

I Reads and makes scale drawings

Measurement and Estimation

ID	Uses vocabulary in comparing and ordering two or more objects (larger, shortest, etc.)
IDR	States the number of units of time in a given interval between two specific events by using improvised time pieces, clocks and calendars
IDR	Tells time by using a clock
ID	Determines a time interval between two events
ID	Determines final time reading given the initial reading and the time interval
IDR	Identifies the date by stating the month, day and year
ID	Finds the weight of an object using both improvised and standard units
ID	Makes a reasonable estimate of the weights of materials using specified units
I	Measures the weights of various objects using metric units
I	Measures the weights of various objects using English units
I	Makes reasonable estimates of weights of objects using metric units
I	Makes reasonable estimates of weights of objects using English units
IDR	Demonstrates that a given capacity or volume of material does not change even if its shape or position is changed
ID	Determines the capacity or volume of a container by counting both the improvised and standard units needed to fill a container
IDR	Finds by experimenting that changing the size of a container changes its capacity
ID	Determines capacity or volume by counting improvised units and standard units
ID	Determines the area of a region by covering the region and counting improvised and standard units
ID	Determines lengths by using improvised and standard units
ID	Measures lengths using metric units
ID	Measures lengths by using English units
ID	Gives a reasonable estimate of lengths in specified units
ID	Reads a temperature scale using the Fahrenheit and the Celsius scales
IDR	Names common coins and bills to the amount of five dollars
IDR	Selects coins needed to obtain a given monetary value
ID	Makes change in coins by using the additive method
IDR	Records amounts of money using the cent symbol and the dollar symbol with a decimal

	I	Selects appropriate units of measurement to determine length, area, volume, perimeter, circumference, angle, time, mass, temperature and capacity
	I	Selects and uses the appropriate instruments to measure length, mass, angle, temperature, capacity and time
	I	Estimates measurements with a reasonable degree of accuracy
	I	Determines the precision of measurement required for a given situation
	I	Selects the unit required for precision of measurement for a given situation
Probability and Statistics	ID	Collects data in different ways
	I	Collects and organizes data
	ID	Sorts out relevant and irrelevant data
	ID	Tells whether a sample of data represents a population
	I	Illustrates how sampling may affect interpretation of data
	I	Distinguishes between biased and unbiased data
	ID	Arranges two or more objects in a number of ways, and collects the resulting data
	ID	Uses physical data objects and pictures to record data
	ID	Constructs and interprets graphical representations such as tables, charts, graphs, maps and histograms
	ID	Reads and interprets diagrams including simple flow charts, tree diagrams, factor trees and Venn diagrams
	ID	Describes some events that are certain to happen and some that are certain not to happen
	ID	Describes some events which are equally likely to happen and other events which are not likely to happen
	ID	Selects events that have an equal chance of occurring
	ID	Selects events that have no chance of happening
	ID	Counts all the possible outcomes of an experiment which has a limited number of outcomes
	ID	Shows that in some instances one event has a better chance of occurring than another
	ID	Specifies the chance of an event happening
	I	Assigns or estimates the probability or odds of a chance event
	ID	Uses observations and data to make predictions

Computing and Computers	I	Computes efficiently—without a calculator—using a. whole numbers b. fractions c. decimals d. percents e. negative numbers
	I	Uses estimation (i.e., calculates with round numbers if the situation can be satisfied with an approximate answer) in mental calculations
	I	Uses estimation in written calculations
	ID	Judges reasonableness of answers
Mathematical Reasoning and Logic	ID	Makes and interprets generalized statements using *all, some, or* and *and*
	I	Recognizes common errors in reasoning
	I	Exhibits critical thinking
	I	Analyzes arguments critically
Application	ID	Translates a real world situation into problems that reflect the situation and applies mathematics to those problems where appropriate

SCIENCE

NOTE: The following topics and objectives are included as examples. Topics, objectives and the length of the unit will be determined by the maturity level and needs of the students. Teachers should modify or add to the sample objectives. Note that these objectives focus on **cognitive** development and therefore must be supplemented by psychomotor and affective objectives to develop a comprehensive unit for children's growth.

TOPIC		CONCEPT/SKILL
Problem Solving	ID	Observes scientific phenomena
	ID	Accurately describes an experience
	ID	Evaluates the accuracy of the reporting of an experience
	ID	Describes a conclusion drawn from a variety of observations
	ID	Infers data from observations
	ID	Forms hypotheses to solve problems
	ID	Sets up experiments in order to solve problems
	ID	Measures to solve problems
	ID	Classifies data to solve problems
	ID	Predicts outcomes from data collected
Living Things—Plants and Animals	ID	States three basic needs of living things
	ID	Compares plants with respect to similarities and differences
	ID	Classifies living things as plants or animals
	ID	Identifies food preferences of different animals
	ID	Classifies animals according to those that hatch and those that are born alive
	ID	Identifies ways in which plants and animals adapt to various environments
	ID	Germinates and graphs growth of seeds and plants
	ID	Distinguishes between vertebrates and invertebrates
Matter and Its Changes	IDR	Defines matter
	IDR	Identifies solids, liquids, gases (states of matter)
	ID	Describes the combinations of different types of matter to make useful materials
	I	Predicts and describes changes in matter
	ID	Demonstrates that matter has mass and occupies space
Energy	ID	Describes the effect of heat on matter
	I	Differentiates between potential energy and kinetic energy
	ID	Demonstrates that force is an action that produces motion

	ID	Defines gravity as a force (pull)
	ID	Explains how energy is required to produce changes in matter
Weather	ID	Explains that rain is moisture or water that has evaporated
	IDR	Explains three uses of rain
	ID	Explains the causes of fog, clouds, wind and snow
	ID	Demonstrates the uses of a thermometer to observe temperature changes
	ID	Explains the causes of changes in temperature
Simple Machines	ID	Identifies simple machines
	ID	States five uses of simple machines
	ID	Constructs a simple machine
	IDR	Demonstrates the use of a simple machine
Electricity and Magnetism	ID	Demonstrates that electricity can be used to produce heat and light
	ID	Classifies objects into two groups—things that magnets attract and things that magnets repel
	ID	Demonstrates that a magnetic pull can pass through many substances
	I	Names three types of magnets
	ID	Demonstrates that electricity flows only when it has a complete path
	I	Distinguishes between static electricity and current electricity
	I	Constructs a compass and demonstrates its use
Rock, Soil Minerals	I	Identifies three types of rocks common to the region
	IDR	Classifies rocks according to texture and color
	I	Names five minerals obtained from the ground
	I	Defines fossils and explains their origin
	I	Explains how rocks are formed and changed by action of heat and pressure
	I	Demonstrates that the disintegration of rocks to form soil is caused by wind, weather, chemical changes and temperature changes
	I	Illustrates the concept of erosion
	I	States at least three reasons for conservation of natural resources
The Atmosphere	I	Names the five layers of the atmosphere
	I	Explains the purpose of the atmosphere
	I	Lists three characteristics of the atmosphere layer in which we live

	I	Names the atmospheric layer in which we live
	IDR	Describes the work of a meterologist
	IDR	Names three instruments used by meterologists to measure weather
Air and Water	I	Defines the words air and water
	I	Lists the chemical properties of air and water
	ID	Names three types of bodies of water (streams, lakes, ponds, seas)
	ID	Identifies water as a major component of all living matter
	I	States the freezing and boiling points of water
	ID	Identifies vehicles that travel by air and by water
	I	Lists uses of air and water by man
Seasons	ID	Names the four seasons
	ID	Describes how seasons differ
	ID	Describes effects of seasonal changes in plants and animals
	I	Matches temperatures with seasons
Scientific Experimentation	ID	Follows directions to set up and conduct experiments
	I	Collects, records and interprets data from experiments
	I	Illustrates a known law through experimentation (Newton's Law of Motion, for example)
	I	Realizes that nothing happens without a cause
	I	Classifies rock by the method of formation (igneous, metamorphic, sedimentary)
	I	Lists at least five minerals found in rocks
The Sun and the Moon	ID	Describes the moon as the earth's natural satellite
	I	Predicts the moon's position over a three month period
	I	Illustrates the size of the sun and the moon in relationship to the earth
	I	Defines meaning of "full moon"
	I	Makes a model of the solar system
	ID	Defines solar system
	I	Explains effects of the sun on celestial bodies (heat and light)
	I	Explains the revolution of the earth and other planets around the sun
	I	Explains sunrise and sunset and the accompanying atmospheric effects

The Planets	ID	Names the nine planets
	ID	Names and describes the planets nearest to the sun
	ID	Names and describes planets farthest from the sun
	I	Illustrates position of planets in space
	ID	Names the largest and the smallest planet
	I	Describes surfaces of the planets
The Stars and the Universe	I	Explains the apparent brightness of a star (distance from earth, size, temperature)
	ID	Describes the sun as a star
	ID	Explains the use of a telescope in viewing stars
	ID	Names the star nearest to the earth (the sun)
	I	Explains the work of astronomers
	I	Defines constellations and identifies North Star (Polaris)
	I	Lists the physical components of our universe
Space Shuttle Columbia	ID	Names two astronauts on a Columbia space shuttle flight
	ID	Identifies location of Cape Canaveral on map
	I	Discussess the mission of the Shuttle Columbia
	I	Discussess the possible risks of flying the first mission of an untried spaceship
	ID	Names the planned landing site of the shuttle
	ID	Makes a chronological list of space activities
The Earth	IDR	States name of the planet on which we live
	ID	Identifies the shape of the earth
	ID	Demonstrates how the earth travels around the sun
	ID	Explains the earth's rotation on its own axis
	ID	Distinguishes between satellites and planets
	ID	Explains uses of manmade satellites
	I	Defines gravity and explains how gravity holds the air and water to the earth
	I	Describes the earth's crust
Famous Scientists	I	Names five scientists
	I	Discusses contributions scientists have made to improve our lifestyle
	ID	Describes the work of a scientist
	I	Defines science
	I	Lists three methods scientists use to investigate

Butterflies	ID	Describes butterflies as insects
	I	Describes physical characteristics of butterflies
	I	Explains the metamorphosis of the butterfly (larva-pupa-adult)
	I	Distinguishes between a moth and a butterfly
Insects	I	Names five insects
	I	Identifies parts of insects body (head, thorax, abdomen)
	I	Discusses the possible need to control or destroy some insects
	I	Discusses insecticides and discusses possible harmful effects of insecticides
Dinosaurs	ID	Describes dinosaurs
	ID	Names three kinds of dinosaurs
	I	Distinguishes between carnivorous and herbivorous dinosaurs
	I	Explains how and why dinosaurs became extinct
	I	Estimates the size of a dinosaur
Reptiles	I	Describes characteristics of reptiles
	I	Names five reptiles
	ID	Distinguishes reptiles from mammals
	I	Explains amphibious life of reptiles
	I	Lists food preferences of retiles
	I	Distinguishes between poisonous and non-poisonous reptiles
The Metric System	ID	States the basic metric units (meter, liter, gram)
	I	Identifies common prefixes to be used with basic units (milli, centi, kilo)
	I	Measures a variety of items using basic metric units
	I	Distinguishes between meter and yard; liter and quart
	I	Estimates measurements
Oceanography	I	Names at least three ways to use the resources of the ocean
	I	Defines oceanography
	I	Describes the exploitation of the oceans' resources
	I	Describes the work of an oceanographer
	IDR	Identifies oceans on a globe or map
	ID	States how much of the earth's surface is covered by water
	ID	Describes characteristics of the ocean floor
Fungus	I	Defines terms: fungus, fungi

	I	Names three types of fungi (bacteria, mold, mildew)
	I	Investigates growth of fungus
	I	Describes how fungi are used
	I	Explains uses of penicillin
	I	Demonstrates how the fungus (penicillin) is grown (stale bread, cheese, fruit)
Heat, Light and Sound	I	Demonstrates that heat comes from the sun, fuels, electricity and friction
	I	Demonstrates that most objects get larger when heated and smaller when cooled
	ID	Names various kinds of sounds
	ID	Classifies loud and soft sounds
	I	Demonstrates the use of a prism
	I	Demonstrates how light is reflected in many directions
Observing Changes	ID	Predicts and describes changes in the environment
	IDR	Gives examples of some things in the environment that have changed
	IDR	Explains developmental changes in an organism (egg-tadpole-frog)
Temperature	IDR	Measures the temperature of some things by using a thermometer
	ID	Recognizes relationships between seasonal changes and changes of temperture
	I	Explains how extreme temperatures can adversely affect our environment
	IDR	Accurately records daily temperatures for a given time span
	IDR	Reads the thermometer
Measurement	IDR	Quantifies with a variety of measuring instruments
	IDR	Measures length, weight and volume of an object
	IDR	Defines standard unit of measurement
	IDR	List the units of measurement
	IDR	Selects units most appropriate to measuring various objects, distances

HEALTH EDUCATION

TOPIC		CONCEPT/SKILL
Alcohol, Tobacco and Drugs	ID	Discusses the importance of adult supervision
	ID	Identifies poison symbols
	ID	Identifies objects or substances which are dangerous if put in mouth
	ID	Discusses the importance of not eating or drinking substances supplied by strangers
	ID	Explains that the use of tabacco may bring about health problems
	I	States that lung cancer and other chronic diseases are found more frequently among smokers
	I	Explains that alcohol affects the body in many ways
	I	States that drugs affect individuals in different ways
	ID	Names some drugs that can be dangerous if misused
Diseases	I	Describes the possible causes of specific communicable diseases
	I	Describes the possible effects of specific diseases
	I	Describes the methods for preventing specific communicable diseases
	I	Takes responsibility for preventing and controlling diseases within self
	I	Describes the role that public and private health agencies play in disease prevention
	I	Describes good and poor health habits
	I	States that many diseases may be cured through early treatment
Health Resources	I	Identifies the many vital health functions performed by locally available public and private health agencies
	I	Describes the environmental factors which affect health in a community (pollution . . .)
	I	Describes the individual's role in disposing of litter
	I	States that every community must provide facilities for sanitation
	I	Describes how sanitary conditions are maintained in the community
Nutrition and Health	I	Discusses practices which aid growth and development
	ID	Describes the relationship of good nutrition, adequate sleep and physical activity to the body's growth and development

	ID	Explains how eating habits can influence body processes in both negative and positive ways
	ID	Identifies the four basic food groups
	I	Describes the basic principles of meal planning
	ID	States the importance of a good breakfast as it relates to energy level and productivity throughout the day
	I	Identifies foods which aid or hinder growth
	I	Discusses proper care of food to increase nutritional value and prevent illness
	I	Describes the result of improper eating as it affects physical well-being
	I	Discusses the problem of obesity at various ages
Personal and Family Health	I	Describes roles and responsibilities of family members in health care
	ID	Describes the helplessness of infants and their need for proper care
	I	Assumes responsibility for own health practice
	I	Demonstrates a sense of responsibility toward others' health
Safety and First Aid	ID	Describes how safe behavior can reduce the possibility of accidents, injury or death
	I	Identifies safe behavior which reduce the possibility of accidents, injury or death
	I	Identifies environmental factors that may result in injury or death
	I	Discusses the dangers of self-treatment
	I	Explains the danger of riding with others whose ability has been impaired by alcohol or drugs
Dental Health	IDR	Visits a dentist's office
	IDR	Demonstrates the correct method of brushing teeth
	IDR	Lists three ways to care for teeth
	IDR	Labels parts of a tooth
	IDR	Describes careers associated with dentistry
Structure, Function and Care of the Human Body	I	States that growth is affected by food, rest, exercise and sleep
	ID	Names parts of the body
	I	Discusses the care and protection of body parts and sensory organs
	I	Discusses body systems a. structure b. function

	I	Describes the general process of matuaration from infancy to adulthood
	ID	States the need for general body cleanliness and care
	I	Describes the methods used for general body cleanliness and care
	I	Applies methods of general body cleanliness and care
	I	Discusses the need for regular physical checkups
Health Careers	I	Describes opportunities for careers in the health field

SOCIAL STUDIES

NOTE: The following topics and objectives are included as examples. Topics, objectives and the length of the unit will be determined by the maturity level and needs of the students. Teachers should modify or add to the sample objectives. Note that these objectives focus on *cognitive* development and therefore must be supplemented by psychomotor and affective objectives to develop a comprehensive unit for children's growth.

TOPIC		CONCEPT/SKILL
Research Skills	ID	Recognizes and states a problem
	ID	Selects effective methods of communicating question(s)
	ID	Frames productive questions
	ID	Formulates hypotheses based on evidence
	ID	Identifies best source(s) to answer given questions
	ID	Locates and works with information from a variety of sources (books, atlases, periodicals, newspapers and other media that are increasingly abstract)
	ID	Evaluates subjective and objective material, distinguishing among fact, inferences based on fact, fiction and opinion
	I	Separates reliable and questionable materials
	ID	Sequences terms which denote time
	ID	Arranges a series of events in chronological order
	I	Constructs and interprets a. graphs b. charts c. tables d. cartoons
	ID	Makes inferences about a situation through observation techniques
	I	Gathers information necessary for understanding an issue
	ID	Organizes information in a usable form
	ID	Gives rational criteria for making evaluations
	I	Proposes alternative possibilities for existing realities
	I	Chooses a reasonable solution to the problem after applying the evidence to the various alternatives
	I	Changes the solution if new data warrants
	I	States reasons for advocated position
	I	Recognizes areas for further study
Orientation to School	IDR	Uses first names of at least five classmates
	IDR	Locates classroom, bathroom, cafeteria, office
	IDR	States two school rules

	IDR	Names three occupations associated with the school
	ID	States the names and describes the role of teacher, principal, librarian, others
	IDR	States the purpose of the school
Learning About Myself	IDR	States name, address, phone number
	IDR	Names main body parts—head, eyes, nose, mouth, neck, arms, fingers, hand, waist, leg, chest, feet, toes, shoulder, elbow
	IDR	States five physical characteristics of self
	ID	States three things that is able to do well
	IDR	States three physical characteristics that cannot be changed—height, skin, color, sex, eye color
	ID	Demonstrates three feelings (sadness, happiness, anger, fear)
	ID	Describes the effect feelings have on self and others
	ID	Describes and discusses four different emotions
Getting Along With Others	ID	Discusses the probable reaction to particular behavior
	ID	Identifies the choices of behavior available in common school situations
	IDR	Describes the value of friendships
	ID	Lists three acts which help make and keep friends
Families	IDR	States ways in which each family member is important
	IDR	Describes the function of the family
	IDR	Names the person who has primary responsibility for providing for the family's basic needs
	ID	Lists each family member's responsibilities
	ID	Lists rules each family member follows
	ID	Describes needs of all people which are similar to own needs
	ID	Describes events and customs special to own and other families
	ID	Discusses the relationship between interests and the type of recreation selected
Home	IDR	Describes own home
	IDR	Names three or more types of homes
	IDR	Names the rooms in a house
	ID	States uses of the house
	IDR	States the importance of knowing street address as a means of insurance against getting lost and as a measure of independence
	ID	Describes the different types of homes according to needs, geographical locations and the ways of life of different families

	ID	Points out food, clothing and shelter that is representative of cultures other than own
People and Their Basic Needs	IDR	States the three basic needs of all people (food, clothing, shelter)
	IDR	States two reasons why people need food (good health, growth, enjoyment)
	IDR	States two reasons why people need clothing (protection, warmth, social acceptance)
	IDR	States two reasons why people need shelter (protection from weather, protection from animals and other outside dangers, a place for family life)
	ID	States at least two ways in which all people are alike
	I	Distinguishes one difference in satisfying each basic need according to geographic location
Community Living	IDR	Names local community
	ID	Lists five ways to live cooperatively in a community
	ID	Lists three things possible to bring about a friendlier neighborhood
	ID	Constructs a map to indicate main points of interest in the community
	ID	Discusses various community programs, events and places of interest
	ID	Identifies rules of all citizens of the community must follow
	ID	Describes resources (goods, services) available within the local community
	I	Describes the history of the local community
	I	Names different sources of products consumed
	ID	Lists two services provided by each of five community helpers
	ID	States that people in a community work together to provide needed goods and services
	ID	States that all communities provide for peoples' needs
	ID	Describes the goods and services available in the local community
	I	Lists the services which all people require regardless of location
	ID	Describes at least five careers pertaining to—transportation, public service, technology, construction, others
	ID	Names several local industries and the products they manufacture
	ID	Describes the special community events
	ID	Discusses the possible value of attending community events

	I	Interviews persons associated with events
	ID	Discusses careers associated with the events
National Holidays and Special Days	ID	States the names and describes the customs of various holidays and special days, and why we celebrate them—Halloween, Thanksgiving, Christmas, New Year's Day, Valentine's Day, Easter, Mother's Day, Father's Day, Flag Day, Independence Day, Passover
	ID	Uses the calendar to find these special days
	IDR	Honors each child by birthday celebration
	ID	Compares holiday traditions observed by families of classmates with holiday traditions observed by own family
	ID	Compares how the holidays are celebrated in our school, our homes and throughout our nation
Farming	IDR	Cares for a garden containing plants commonly grown in the area
	IDR	Identifies at least two baby animals by their proper names (calf, colt, chick)
	ID	Names at least two farm machines
	IDR	Compares two different farm animals by size, body covering, use, etc.
	ID	Identifies at least one animal that produces a non-food-related product
	ID	Identifies at least one product obtained from each of three farm animals
	ID	Names at least three tasks farmers perform in maintaining a farm
Careers	ID	State that people work in order to provide for personal and family needs and wants
	IDR	Describes the work schoolage children perform
	ID	Discusses that individuals have potential for a variety of jobs but that all work is important
	ID	Lists 10 careers open to both men and women
	I	Describes personal abilities and interests which might lead to particular careers
	ID	Identifies tools and equipment associated with several occupations
Economics	ID	States the importance of family member's choosing priorities for the way the family income is spent
	IDR	States that families must buy and pay for all goods and services
	ID	Discusses that work is an integral part of a lifestyle

	I	Discusses that within an occupational area or group there is a wide variety of career choices open to men and women
	ID	Is familiar with the roles of helpers who dispense needed goods—grocer, druggist, clothing salesperson, hardware, merchant, letter carrier, butcher
	ID	Is familiar with the roles of helpers who dispense needed services—police officers, firefighters, doctor, dentist, nurse, bus driver, millworker, banker, barber, garbage collector, teacher and rest of school staff, librarian, builder, plumber
	ID	Defines "salary", "spending" and "saving"
	ID	Lists services commonly available in communities
	ID	Names manufactured goods which are required or desired
	ID	Differentiates between personal needs and wants
Circus	IDR	Identifies four circus animals
	IDR	Assumes a role in a mock circus
	IDR	Uses five terms correctly—acrobat, ringmaster, juggling, high wire, trapeze, sideshow
	ID	Explains that clowns are people whose job it is to make people laugh
	ID	Discusses ways circuses move from place to place
Map and Globe Skills	IDR	States the purpose of maps
	ID	Uses small objects to represent large ones
	ID	Devises map symbols and legends for maps
	ID	Uses a variety of maps—physical, political, economic for information
	I	Uses the grid system to locate exact position
	I	Uses parallels and meridans in determining directions
Conservation	IDR	Labels and describes physical features of the community
	ID	Discusses use of different physical features
	ID	Discusses misuse of land and resources
	I	Discusses how misuse of land and resources can be prevented
	ID	Demonstrates conservation by awareness by not wasting paper, by turning off lights and the like
	ID	Describes two ways to help conserve resources at home and at school
	ID	Names two modes of transportation used to conserve gas
	I	Lists renewable and non-renewable resources

Study of a Foreign Country	IDR	Prepares and tastes two foods associated with a country
	IDR	Produces at least one art product which is representative of the culture studied
	ID	Compares daily life of self and children of the same age in the country studied
	ID	Compares customs of the country to customs practiced in the United States
	ID	Describes five physical or cultural characteristics of the country
	IDR	Compiles a scrapbook containing map, flag, location and size, population, climate, religions, capital city, government, main occupations, transportation, main products, natural resources, education, facts of interest
	IDR	Speaks five simple phrases in the foreign language such as "good morning," "My name is _____"
Transportation	ID	States four ways to travel from place to place—by water, rail, roads and air
	ID	Identifies types of transportation
	ID	Places 10 forms of transportation in chronological order
	ID	Discusses the roles of transportation and communication helpers—boat captain, sailor, truck driver, bus driver, ambulance driver, train engineer, train conductor, airplane pilot, cabin attendants, telephone operator, radio announcer, TV announcer
	IDR	Names various freight cars that are familiar sights in the local area
	IDR	Names at least three types of vessels used in water transportation
	ID	Classifies various forms of transportation by power source
Communication	IDR	Lists ten historical or modern forms of communication
	IDR	Builds a telegraph
	IDR	Develops a code for communicating with friends
	IDR	Learns international distress signal
	IDR	Invents a new form of communication
Geography	IDR	Describes the location of the various objects in environment (near, far, up, down, under, back, front, here, there, above, forward, backward)
	IDR	Follows oral directions in moving body or objects up, down, forward and backward
	IDR	Places or moves objects—in, on, beside, above, below, over, under, around, through—as requested
	IDR	Identifies left and right

	ID	Draws maps of familiar locations (within school, in community, in state)
	I	Labels and describes physical features of the community, state, region, country or continent
	ID	Identifies pictures of volcanoes, mountains, rivers, lakes, deltas, bluffs
	ID	Locates main physical features of the state on an outline map
	IDR	Names the continents and oceans of the world
	ID	Draws pictures to explain geographical terms
	IDR	Names the fifty states of the United States
Georgia	IDR	Locates Georgia on an unmarked political outline map of the United States
	ID	Draws the topography of the state
	ID	Labels the main agricultural products of various parts of the state
	I	Places the main events of Georgia's history in chronological order
	I	Describes the role of the seacoast in Georgia's economic past and future
	I	Describes three heroes in Georgia's history
American Government	IDR	Names the present President of the United States
	IDR	Names the present Vice President of the United States
	IDR	Names George Washington as the first President of the United States
	I	Discusses the rights and responsibilities of all citizens
	I	Defines the work of the three main legislative bodies
	I	Discusses current events as they pertain to federal government
	I	Describes in general terms the events leading to the American Revolution
	ID	Identifies purpose and need for government
	I	Identifies different governments (city, county, state, federal)
American History	I	Describes the people living in America prior to Columbus' visit
	ID	Describes George Washington's boyhood in colonial America
	ID	Describes everyday life in pioneer America
	IDR	Compares America's first flag to the flag in use today
	ID	Describes how colonial America was settled
	I	Identifies theoretical forms of government (democracy, socialist, communist, monarchy)

	I	Locates and describes places in America that honor the heroes or main events in America's history
	I	Places events studied in chronological order
	I	Maps the various exploratory, trade and settlement routes
Let's Travel To . . . (individual study)	IDR	Selects a country to study
	IDR	Develops materials to interest class members in visiting the country selected
	ID	Collects and presents data in the form of charts, pictures, graphs, written narrations and dramatizations
	ID	Presents information of interest to prospective tourists—costs, accommodations, places of interest
Famous People	IDR	Selects a historical or contemporary person to research
	ID	Presents information on person researched in an informative, interesting and concise manner
	ID	Uses more than two resources in researching information
	I	Uses bibliographic format in citing resources
Citizenship	ID	Defines the term citizenship
	ID	Describes the responsibilities of all citizens
	I	Describes the rights of all citizens
	IDR	Demonstrates honesty and kindness
	IDR	Uses good manners
	IDR	Follows school rules
	ID	Shows responsibility
	ID	Shares and plays fairly
	ID	Helps others
	ID	Makes decisions and accepts the consequences of choices
	IDR	States three classroom rules
Learning	I	Distinguishes between instinctive and learned behavior and activities
	I	Discusses that personal values determine "right" action
	I	Describes how customs and values are taught
	I	Lists two personal values and the actions(s) that result from them
	I	Discusses the values of learning in order to solve problems, make predictions and make value judgment
	I	Lists two facts which have been learned and the actions such learning has produced

TOPIC		CONCEPT/SKILL
Traffic Safety	IDR	Describes three precautions to take in caring for bicycles
	ID	Describes own bicycle usage and safe operation
	ID	Defines rules as guides for conduct in traffic to ensure the safety of all
	ID	States local and state traffic rules and regulations (remember, these rules and regulations apply to all bicycle riders and pedestrians)
	ID	Identifies five bicycle safety rules that should be observed at all times
	ID	Identifies at least five pedestrian safety rules that should be observed at all times
	I	Describes the basic laws governing traffic, which are uniform throughout the country
	I	Names the right-of-way rules for vehicles and pedestrians
	I	States that traffic laws are intended to make traffic flow smoothly and safely
	I	States that policeman's directions take precedence over stationary signals
	ID	States the basic rule in traffic—yield, don't take the right-of-way
	ID	Identifies color and meaning when given specific signs and shapes
	ID	Draws the eight basic sign shapes
	ID	States the meaning of each sign and signal
	ID	Performs bicycle hand signals
	ID	Explains what it means to be a good defensive driver or rider in traffic—identify, predict, decide and execute (IPDE)
Home Safety	ID	Describes the relationship between safety and personal responsibility
	ID	Discusses safe ways to use objects commonly found in the home
	ID	Explains correct ways to use electrical equipment
	I	Describes procedures to be used if accidents occur at home
	I	Lists ways fires can be prevented
	ID	Demonstrates procedures for reporting fires
	I	Describes safety procedures around animals
	I	Describes safety guides to be used when around firearms or explosives

	I	Discusses procedures for dangerous weather conditions
School Safety	ID	Lists classroom rules
	ID	List school rules
	ID	Describes rules to be followed in riding a school bus
	ID	Describes rules to be followed on class trips
	ID	Describes ways to keep safe on the playground
	I	Describes what to do if injured at school
	I	Describes safety procedures for fire and tornado drills
	I	Applies safety procedures during fire or tornado drills
First Aid	I	Describes first aid procedures for minor injuries (small cuts, splinters, mild burns)
	I	Discusses how and where to get help in case of major injury
	I	Discusses current first aid procedures used in emergency situations
Community	I	Names services the community provides to help keep citizens safe
	I	Describes medical emergency services available in the community
	ID	Discusses the duties of a variety of community helpers
	ID	Discusses careers associated with safety
	I	States the rules of pedestrian safety
	I	Lists rules for safety in or on water
	I	Lists safety rules to be followed while participating in a variety of recreational activities

Appendix E

Sample Unit Plans

Animals
Families
Our Families at Work in the Community
People in Space

Process Categories: Observing/Selecting/Identifying: Relating Classifying

Concepts

1. Information about animals can be communicated in many ways.
2. People use animals in many ways.
3. Animals require care and often need protecting.
4. Animals are alike and different. Animals can be grouped according to where they live, how they move and so on.
5. There are many kinds of animals, some of which are unusual.
6. Animals need food, care and shelter in order to live.

			COGNITIVE OBJECTIVES				
CENTER THEMES	**PSYCHOMOTOR OBJECTIVES**	**AFFECTIVE OBJECTIVES**	**COMMUNICATION SKILLS**	**CREATIVE ARTS**	**MATHEMATICS**	**SCIENCE**	**SOCIAL STUDIES**
Learning About Animals	Visual discrimination Visual detail Eye-hand coordination	Persistence Taking Turns	Uses Aids Vocabulary Word Meaning				Acquire information
Animal Fare	Visual discrimination Nonlocomotor movements	Persistence Empathy	Uses aids Vocabulary Compare Classify	Art expression		Animal animal interactions	Acquire information
Animals Are Friends Taste discrimination	Manipulation: gross motor Eye-hand coordination	Sharing Taking turns	Word meanings Recall main ideas Classify			Animals animal interactions	Acquire information
Fun with Animals	Nonlocomotor skills Interprets ideas Eye-hand coordination	Confidence Pride in accomplishments Sharing	Discriminates sounds Uses symbols	Music Art expression Drama		Describes sounds	

Learning Center Planning Sheet **Unit Theme: Animals**

Center Theme: Learning About Animals

Concepts

1. There are many kinds of animals, some of which are unusual.
2. Animals need food, care and shelter in order to live.

Introduction: Take a neighborhood walk, chart all living things seen. Share experiences with animals including safety precautions. Play guessing game "Who Am I?" describing various animals. Name animals in "feely" box. Play game "For My Pet"; each child adds a name of an animal in turn while entire sequence is repeated. For example, "For My Pet I want a lion . . . lion, alligator . . . lion, alligator, turtle, etc." Introduce activities.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . develop and refine sensory skills using visual discrimination. use and develop coordination of sensory skills—eye-hand coordination. *Affective* develop the ability to persist in a task. develop the ability to take turns. *Cognitive* A. Language Arts demonstrate an understanding of and use of various aids to develop and expand vocabulary. learn specific meanings of words. *B. Social Studies* acquire information through reading, listening, observing and surveying.	1. Look through and read books and magazines. 2. Listen to tape-recorded stories. 3. Tape record an actual experience with an animal. 4. Work with animal dominoes. 5. Match animal pictures (gummed seals). 6. Put puzzles together. 7. Dictate ending to a story, "I wish I was . . ." Illustrate. 8. Draw an unusual animal for the bulletin board. 9. Dictate a story about an animal from a picture or from an actual experience. Make booklet of story. 10. Play wildlife lotto. 11. Label study prints with names of animals. 12. Assemble take-apart wooden animals. 13. Play concentration, matching pictures of animals. 14. Draw or trace outline of various animals, color, label, assemble into booklet. 15. Play animal "fish" asking for particular animal cards. 16. Play "animal snap". First player to name animal wins card. 17. Play board game. Players take turns naming animal and moving the number of spaces indicated by the spinner. 18. Assemble see-que puzzle.	Books: *Animals Everywhere*, D'Auloire *Animals For Me*, Lenkl* *I'll Protect You From the Jungle Beasts*, Alexander *The Big Book of Animals*, *Every Child Should Know*, Humphreys Magazines: *Ranger Rick* *National Wildlife* *Animal Kingdom** Tapes of stories and teacher-recorded books, blank tapes, "Little Woodland Books", Martin* Tape recorder Animal dominoes Gummed seals on cards Puzzles Paper, pencils, crayons, drawing paper Bookbinding materials, oaktag, etc. Wildlife lotto Study prints Name cards Concentration cards Fish game (animal pictures) Snap game Board game Animal See-ques *(The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media	*Psychomotor* The child . . . *discriminates among pictures using visual cues. notes visual differences requiring an attention to detail. *manipulates small objects (pictures, puzzle pieces) efficiently. *Affective* *successfully completes at least one task per day. *waits until materials are available for use. *Cognitive* *uses books, pictures and other aids to expand vocabulary. *uses words correctly in naming and describing animals, their homes, surroundings. *gains information by listening and observing. *(Assessed at more than one center).

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OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
		specialists, working together, can identify materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained. The following subject entries are suggested for use in the card catalog or standard indexes in locating local resources related to this unit: Animal Communication; Animal Defenses; Animal Locomotion; Animal Sounds; Animals; Animals—Fiction; Animals—Habits and Behavior; Animals—Infancy; Animals—Stories; Animals—Migration; Animals—Poetry; Animals—Song and Music; Animals—(specific geographic locations); Animals—Training; Animals—Mythical; Animals—Dictionaries; Color of Animals; Desert Animals; Domestic Animals; Pets, Zoological Gardens; Names of animals with the subdivision stories; i.e. Dogs—Stories; Names of the animal kingdom, i.e. Reptiles; and Names of individual animals, i.e. Beavers.	

Learning Center Planning Sheet

Unit Theme: Animals

Center Theme: Animal Fare

Concepts

1. Animals are alike and different. Animals can be grouped according to where they live, how they move and so on.

Introduction: Mimic various ways animals move, charting words which describe movement. Learning song "This is the way . . . the elephant walks, the lion stalks, the monkey climbs . . ." to tune "This is the Way We Wash Our Clothes." View film "Animals Move in Many Ways"; discuss. Introduce center materials and activities.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . perform basic nonlocomotor movements such as balancing, bending, stretching, curling. develop and refine sensory skills using visual discrimination. *Affective* develop the ability to persist in a task. develop the ability to empathize with the feelings of others. *Cognitive* *A. Creative Arts* expresses ideas through art media. *B. Language Arts* demonstrate an understanding of and use of various ab[illegible] develop and expand vocabulary. learn specific meanings of words. recognize information and ideas through classifying. *C. Science* describe animal/animal interactions *D. Social Studies* acquire information through reading, listening, observing, surveying.	1. Bring small caged animals or study the animals in the center. Draw and describe what is observed for a picture or story. 2. Pantomime movements of animals observed. 3. Observe or study two animals. Dictate information to an adult about ways the animals are alike and different. 4. Name adult and baby animals from poster cards. Compare to human families. 5. Sort pictures of animals as to where they live. 6. Match pictures of animals with pictures of their homes. 7. Solve a puzzle by matching the ears, feet and tail of animals to their bodies. 8. Help draw a mural with animals put into four groups—zoo, farm, pet, forest. 9. Use a magnifier to study an insect (alive in jar) and a plant leaf. Tell about the differences observed; chart responses. 10. Group pictures or models, zoo/pet/farm/forest, alive, dead, by body coverings, by number of legs, wings, tails, by size. Count and record totals. 11. Dictate an idea remembered from story *How Animals Eat*. 12. Use large picture of various kinds of animals to count animals, count number of legs, wings, tails, count animals with hair, feathers. Match or print the numeral beside each set. 13. View filmstrips.	Small animals Drawing paper Crayons Newsprint Poster cards "Animals and Their Young" Assorted animal pictures Boxes labeled "above/on/under the ground" Animal/Home Match-to game Lift up puzzle (body parts) Mural paper Paints, chalks, pens Magnifier Live insect in jar Leaf Pictures of animals or models *How Animals Eat*, Selsam Large pictures, posters Filmstrip projector Filmstrips: "Forest Babies" "Forest Families" "Animals of the Pond" "Animals Get Ready for Winter"° ° The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained.	*Psychomotor* The child . . . °bends, balances, stretches, curls in mimicing animal movements. °discriminates among pictures using visual cues. *Affective* °successfully completes at least one task per day. describes observed animals in terms of hypothesized comparable human feelings. *Cognitive* °uses art to express ideas about animals. °uses books, pictures and other aids to expand vocabulary. uses words correctly in naming and describing animals, their homes, surroundings. states at least one way in which two animals are alike and one way they are different. °Classifies animals by at least one characteristic (use, habitat, appearance). °describes animals as living in families. °gains information by listening and observing. °(Assessed at more than one center).

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Learning Center Planning Sheet **Unit Theme: Animals**

Center Theme: Animals Are Friends

Concepts

1. Animals are used by people in many ways.
2. Animals require care and often need protecting.

Introduction: Discuss care of pets transferring these same needs to other animals by discussing pictures of other animals. What care do other animals need? Introduce new class pet, recording its care and those responsible. Discuss picture foldouts "Animals That Help Us." Learn fingerplay "Animal Homes." Introduce materials and activities at the center.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . practice and refine manipulation of objects (hammering, constructing). develop and refine sensory skills using taste discrimination. *Affective* develop the ability to share. develop the ability to take turns. *Cognitive* *A. Language Arts* learn specific meanings of words. recognize, recall and retell main ideas. recognize information and ideas through classifying. *B. Physical Education* use and develop combinations of sensory skills such as eye-hand coordination. *C. Science* describe animal-animal interactions. *D. Social Studies* acquire information through reading, listening, observing and surveying.	1. Build farms, zoos, circuses, jungles, forests' with blocks and model animals. Use books to make labels for structures. 2. Construct a birdhouse from wood or milk carton. 3. Measure sand or water to "feed" animals according to chart. 4. Care for stuffed animals in housekeeping area. 5. Count and graph the kinds of animals classmates have as pets. 6. Taste various milk products. Describe tastes, chart responses. 7. Experiment with eating without using hands. 8. Match pictures of food with pictures of animal sources. 9. Describe information from picture foldouts "Animals That Help Us"; make story or booklet. 10. Use magnifying glass to study leather, wool yarn, fabric. 11. Weave paper strips to make "fabric." 12. Sort pictures of animals by their use—work, clothing, food, companionship, protection.	Blocks Model animals Books Paper Crayons, pencils Wood, milk cartons String Scissors Sand or water table Chart listing animals and amounts of food required Housekeeping props—beds, "food", dish, leash, brush Graph paper Milk products—butter, cheese, ice cream, evaporated milk, yogurt, cottage cheese, cream, sour cream Crackers, cookies Pictures of food Pictures of animals Foldouts "Animals That Help Us" Bookbinding materials Magnifying glass Leather Wool, yarn Fabric Paper strips Assorted pictures of animals	*Psychomotor* The child . . . handles hammers, blocks efficiently. differentiates among the tastes of various foods. *Affective* *shares construction, measurement or other materials with others. *waits until materials are available for use. *Cognitive* *uses words correctly in naming and describing animals, their homes, surroundings. recalls main ideas of class discussion on "Animals That Help Us." *classifies animals by at least one characteristic. (use, habitat, appearance). *controls manipulatives (blocks, dishes) efficiently. *controls tools, crayons, scissors, efficiently. *describes animals as living in families and helping humans (work, keep warm) *gains information by listening and observing. *(Assessed at more than one center).

Learning Center Planning Sheet **Unit Theme: Animals**

Center Theme: Fun With Animals

Concepts

Information about animals can be communicated in many ways.

Introduction: Take turns pantomiming various animals while the rest of the class guesses animals can be mimiced in follow-the-leader format. Play record "Sounds Around the Farm and Zoo." Name and mimic animal sounds. Read and discuss *Can I Keep Him?* (Kellog). Introduce activities and materials at the center.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . perform basic nonlocomotor movements such as balancing, bending, extending, curling. use movements to interpret ideas. use and develop coordination of sensory skills—eye-hand coordination. *Affective* display increased confidence in ability to attempt new tasks with anticipation of success. develop a sense of pride in accomphishments. develop the ability to share. *Cognitive* A. *Creative Arts* express ideas through art media. B. *Language Arts* recognize and discriminate among sounds and sound signals in environment. interpret and use symbols and symbolic language. C. *Physical Education* use and develop combination of sensory skills such as eye-hand coordination. D. *Science* describe sounds as low, high, loud.	1. Make and shape animal cookies. 2. Decorate round ripple cookies as lion's head—licorice strip for whiskers, life-saver eyes, red hot tongue, gumdrop nose to fill hole. 3. Dramatize animal actions or stories. 4. Listen to records, move as music suggests or plan a puppet play. 5. Make sock, bag or stick puppets. 6. Lace animal cards. 7. Construct pictures of animals from geometric shapes glued on paper. 8. Draw a favorite animal with labeling or story written by child or adult. Display on bulletin board. 9. Construct a zoo, farm, forest diorama. 10. Model with clay. 11. Glue yarn to art paper to outline an animal. 12. Cut out a picture of an animal and glue on paper. Complete drawing with crayons, paint. 13. Sculpture animals from boxes, rocks or styrofoam pieces. 14. Complete a drawing of an animal from a prepasted circle or oval on art paper. 15. Make paper plate animal masks. 16. Color and cut out a zoo animal. Paste on paper. Glue on black strips to make bars of a cage.	Cookie pans, table knives Cookie dough Frosting Ripple cookies and decors as listed Animal face puppets Assorted hand puppets Record player Listening station, earphones Records: "Birds, Beasts, Bugs and Little Fishes," Folkways; "Jungle Animals and Farm Animals," Kimbro * Puppet making materials—rock, sticks, bags, yarn, fabric, buttons, construction paper Lacing cards in animals shapes Assorted geometric shapes Art paper Glue Crayons, chalks, pens, paints Shoe boxes for diorama Clay Yarn Circles, ovals prepasted on art paper Paper plates Yarn, paper, buttons, etc. *(The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained).	*Psychomotor* The child . . . *bends, balances, stretches, curls in mimicing animal movements. expresses ideas through puppetry and pantomime. *controls manipulatives (puppets, scissors, brushes) efficiently. *Affective* shows an interest in and attempts a variety of activities. shares the results of work with others. *shares art or cooking materials with others. *Cognitive* *uses art to express ideas about animals. mimics or names five sounds animals make. measures ingredients correctly using cups, teaspoons, bowls. *controls manipulatives (puppets, plates) efficiently. *controls tools (crayons, brushes) efficiently. uses words such as loud, low, shrill in describing the sounds animals make. *(Assessed at more than one center).

Record Keeping

Unit Theme: Animals

Explanation of Code

- – demonstrates less than satisfactory performance
- x demonstrates satisfactory performance
- + demonstrates consistent success and understanding (or date)

OBJECTIVES	Children's Names
Psychomotor	
The child . . . handles hammers, blocks efficiently.	
controls tools (crayons, scissors) efficiently.	
bends, balances, stretches, curls in mimicing animal movements.	
expresses ideas through puppetry and pantomime.	
manipulates small objects (pictures, puzzle pieces) efficiently.	
controls manipulatives (puppets, scissors, brushes) efficiently.	
Affective	
successfully completes at least one task per day.	
shares construction, measurement, art, cooking or other materials with others.	
shows an interest in and attempts a variety of activities.	
waits until materials are available for use.	
describes observed animals in terms comparable human feelings.	
shares the results of his work with others.	
Cognitive	
gains information by listening and observing.	
notes visual differences requiring an attention to detail.	
discriminates among pictures using visual cues.	
uses books, pictures and other aids to expand vocabulary.	
uses words correctly in naming and describing animals, their homes, surroundings.	
mimics or names five sounds animals make.	
uses words such as loud, low, shrill in describing the sounds animals make.	
measures ingredients correctly using cups, teaspoons, bowls.	
classifies animals by at least one characteristic (use, habitat, appearance).	
states at least one way in which two animals are alike and one way they are different.	
describes animals as living in families, helping humans, working, keeping warm.	
differentiates among tastes of various foods.	
uses art to express ideas about animals.	

Process Categories: Observing/Selecting/Identifying Communicating

Concepts

1. Each family member has particular responsibilities and follows rules.
2. Each family has at least one adult who takes primary responsibility for fulfilling the family's basic needs.
3. Families work and play together.
4. Each member of a family is important.
5. The type of recreation selected depends on people interests.
6. The family is a special group of adults and children who live, work and play together.
7. The basic needs of people are similar even though homes, clothing, food, language and customs may vary.

			COGNITIVE OBJECTIVES				
CENTER THEMES	**PSYCHOMOTOR OBJECTIVES**	**AFFECTIVE OBJECTIVES**	**COMMUNICATION SKILLS**	**CREATIVE ARTS**	**MATHEMATICS**	**SCIENCE**	**SOCIAL STUDIES**
Leaning About Families Eye-hand Coordination	Auditory discrimination Relationships—parent-child sibling	Identify family differences Variety of purposes	Acceptable form	Art—expression Appropriate operation	Tables, charts		Variety of sources Basic needs
Family Work Visual discrimination	Auditory discrimination Rights and responsibilities Eye-hand coordination	Relationships—parent-child, sibling Variety of purposes	Acceptable form	Art expression	Tables, charts		Basic Accept role as family member
Family Play	Visual discrimination	Relationships—parent-child	Variety of purposes	Art expression	Translate problems		Uses maps Community resources
Families in Other Countries	Basic movements Auditory discrimination Taste discrimination	Family differences Ethical principles	Basic Vocabulary Foreign Language: Comprehension Identify country Recognize customs				Variety of sources Cultural borrowing Basic needs

Learning Center Planning Sheet **Unit Theme: Families**

Center Theme: Learning About Families

Concepts

1. The family is a special group of adults and children who live, work and play together.
2. Each member of a family is important.

Introduction: Define families, discuss briefly. Chart responses from individual or small group, "What My Family Does for Me". Introduce activities and materials available at center. Review or develop limits to use and care of materials as needed.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . develop and refine sensory skills using auditory discrimination. use and develop coordination of sensory skills, i.e., eye-hand co-ordination. *Affective* develop a sense of identity as a unique individual who accepts role in family. develop an understanding of the nature of parent-child relationships. develop an understanding of the nature of sibling relationships. *Cognitive* *A. Creative Arts* express ideas through the use of art media. *B. Language Arts* use generally accepted oral and and written language forms. use oral language for a variety of purposes. *C. Mathematics* construct and interpret graphical representations such as tables, charts, etc. select appropriate operations on whole numbers for a given physical situation. *D. Social Studies* locate and work with information from a variety of sources. recognize and illustrate that all human beings have basic physical and psychological needs.	1. Make a booklet which includes each member of the family. Illustrate, label and describe each person. 2. Draw a family portrait. 3. Make puppets of family members. Plan and present a dramatization which includes daily activities. 4. Make family members from pipe cleaners and use these to tell about the family. 5. Read available books or filmstrip(s). Share information by dramatizing, illustrating and or writing main ideas. 6. Cut out or draw family members and back with oaktag and flannel. Plan and present a story. 7. Interview class members who brought photographs of their families. A. Work with a partner to write ways in which the two families are the same and ways they are different. B. Write a story pretending you are the family pet that is describing your family. C. Make a family scrapbook which includes a picture and description of a family member, activities done together, and what is most liked about the family. 8. Gather data and chart the number of people in each classmate's extended family. Compute the average. 9. Ask grandparents about differences in family life when they were young and now. Share an interesting fact about their early years. 10. Question family members in order to complete a family tree which includes names and birthdays of ancestors.	Art paper Crayons, chalks, pens Book binding materials Puppet-making materials (sacks, sticks, socks, paper, buttons, yarn, etc.) Pipe cleaners Construction paper Scissors, stapler, glue Books: *Families and Their Needs*, Anderson *Everyday Living*, Harris *Debbie and Her Family*, Lenski *Let's Find Out About the Family*, Pitt *My House*, Schlein *All Kinds of Families*, Simon *What Every Kid Should Know*, Kolb, & Viscott, etc.* Filmstrip: "Sights and Sounds of Home"* Chart paper Newsprint Family Tree Outline World Map Encyclopedias, books, etc. Book: *Home Life in Colonial Days*, Earle* Book of names Several issues of Sunday paper containing genealogy column. Filmstrip and projector: "Heraldry" (or encyclopedias, books) Example of census report *(The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify	*Psychomotor* The child . . . gains information by listening to family and class members during interviews. manipulates tools (scissors, crayons, etc.) successfully to produce puppets, models drawings, etc. *coordinates movements of objects (puppets, and or models) to express ideas. *Affective* describes willingly his her family. *states at least one way in which his her family is the same, and is different from another classmate's family. *acknowledges the presence of and at least one contribution made by each family member. *Cognitive* *uses art to express ideas. *expresses ideas clearly orally and in writing. *uses oral language to relate information. *uses oral language to describe experiences. *graphs member of immediate and or extended family correctly. computes ages and averages correctly. *uses a minimum of two resources in acquiring information (filmstrips, books, etc.) *states at least two ways in which all families are alike. *(Assessed at more than one center).

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
	11. Compute the ages of ancestors whose birthdates are known. 12. Read and share information about family life in Colonial America. 13. Bring and share information about historical items of interest. 14. Research origin and meanings of classmates' first names. 15. Read genealogy column in weekly newspaper and share this information. 16. Research medieval coats of arms. Create a coat of arms for your family. 17. Visit the courthouse to find out what kinds of records are kept there. Collect examples. 18. Fill out a census report for the family.	materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained. The following subject entries are suggested for use in the card catalog or standard indexes in locating local resources related to this unit: Family; Family—Fiction; Family—Poetry; Divorce; Domestic Relations; Home; Parent & Child; Families—Pictorial Works; Families—Poetry; Fathers and Daughters; Fathers & Sons; Mothers; Fathers; Mothers and Daughters; Mothers and Sons; Grandfathers; Grandmothers; Grandparents; and Home and School.	

Learning Center Planning Sheet **Unit Theme: Families**

Center Theme: Family Work

Concepts

1. Each family member has particular responsibilities and follows rules.
2. Each family has at least one adult who takes primary responsibility for fulfilling the family's basic needs.

Introduction: Pantomime a variety of family members performing tasks while classmates guess identities. View film "Our Family Works Together". Discuss film and chart main ideas. Introduce activities and materials in center.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . develop and refine sensory skills using auditory discrimination. develop and refine sensory skills using visual discrimination. use and develop coordination of sensory skills, i.e., eye-hand coordination. *Affective* develop an understanding of the nature of the parent-child relationships. develop an understanding of the nature of sibling relationships. develop an understanding of the rights & responsibilities of one's self and others. *Cognitive* *A. Creative Arts* express ideas through the use of art media. *B. Language Arts* use oral language for a variety of purposes. uses oral language for a variety of purposes. *C. Mathematics* construct and interpret graphical representations such as tables, charts, etc. *D. Physical Education and Health* demonstrate knowledge & attitudes for understanding and accepting roles and responsibilities as family members. *E. Social Studies* recognize and illustrate that all human beings have basic physical and psychological needs.	1. Write and illustrate one responsibility belonging to each family member. 2. Collect data and graph chores done by classmates at home. 3. Interview parent(s) to find out tasks they perform for family. 4. Describe in words and or in pictures family assigned responsibilities 'Work I Do at Home". 5. Work with others to dramatize the work done by family members. 6. Draw, describe parent(s) or adult at work. 7. Graph occupations represented by the adults with whom child lives. 8. Write a paragraph telling how mother father might describe you. 9. Describe in drawings and or writings how you show your family you care. 10. Make a "Helping Hands" coupon book offering to do specific tasks. 11. Draw and write a cartoon describing family situations if no one did their chores. 12. Draw, list or sort cards into tasks which family does daily, weekly, monthly or yearly. 13. Describe a task done at home. Include "how I helped" and "how others helped" 14. Draw a picture of the family working together. 15. Cut out pictures of tools and paste them next to the person who uses them most. 16. Work in a small group to illustrate and or list rules parents and children must follow.	Art paper Crayons, colored pencils pens, chalk, etc. Writing paper Graph paper Props for dramatization (rakes, detergent box, cooking utensils, hammer, etc.) Filmstrips, projector "Janet Helps Mother" "Helping at Home" etc.,* Task cards Catalogs for cutting Scissors Filmstrips and records: "Just What do Mothers Do?" "What Else do Fathers Do?" etc.* Records: "Families at Work" etc.* *(The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained.)	*Psychomotor* The child . . . *gains information by listening to family and class members during interviews. *includes pertinent visual cues in communicating ideas. *coordinates movement of objects (puppets, props) to express ideas. *Affective* *acknowledges the presence of and at least one contribution made by each family member. describes his/her responsibilities within the family. *Cognitive* *expresses ideas through art. *expresses ideas clearly orally and in writing. *uses oral language to relate information. *graphs chores and or occupations correctly. identifies a minimum of two responsibilities belonging to each family member. *states at least two ways in which all families are alike. *(Assessed at more than one center).

Learning Center Planning Sheet

Unit Theme: Families

Center Theme: Family Play

Concepts

1. Families work and play together.
2. The type of recreation selected depends on peoples' interests.

Introduction: Each child draws and shares one recreational activity done with the family. Learn song "Going to the Fair" (This is Music 3) and add verses as appropriate. "Little Family," "I Love My Family" (This is Music 1) are also appropriate to the unit.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . develop and refine sensory skills using visual discrimination. *Affective* develop an understanding of the nature of the parent-child relationship. *Cognitive* *A. Creative Arts* express ideas through the use of art media. recognize the expressive qualities of music. *B. Language Arts* use oral language for a variety of purposes. *C. Mathematics* translate a real world situation into problems that apply mathematics to those problems where appropriate. *D. Physical Education and Health* identify and explain where community resources are located and how to use them. *E. Social Studies* use a variety of maps-physical, etc.—for information.	1. Bring photographs, postcards and souvenirs of family trip. Plan ways to share this information. 2. Research and tell about one historic site visited. Locate on map. 3. Research and report on recreational facilities available in local community using newspapers and telephone directory. 4. Plan a trip. Describe location and sights. Include mileage and estimated cost. 5. Draw a picture and write sentences to describe family having fun together. 6. Make scrapbook which contains information about: places visited with family, places visited with friends, places visited alone, places heard/read about, possible future sites for visits. 7. Survey class and make a mural illustrating leisure time activities. 8. Match pictures with place names. 9. Solve puzzle or play dominoes to match names of locations with sights. 10. Make a circle-a-word puzzle which includes places to visit in own community, country or state. 11. Compute mileage to designated destination.	Maps Brochures, pamphlets from local Chamber of Commerce. Newspapers Telephone directory Assorted travel brochures Encyclopedias Motel/Hotel booklets List of foods to be cost-researched locally Mural paper Art paper Writing paper Crayons, pens, pencils Pictures of locations (postcards) Names of places on cards Place puzzles or dominoes List of destinations Rulers Filmstrips, projector "Vacation in the City" "The City Park" "On the Road to the Country" "City Playground" "Traveling" "A Day With Your Family"* Record, record player "Our Auto Trip"* *(The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained. The following subject entries are suggested for use in the card catalog or standard indexes in locating local resources related to this unit: Vacations; Specific Destinations.	*Psychomotor* The child . . . *includes pertinent visual cues in communicating ideas. *Affective* shares experiences regarding family recreational activities. *Cognitive* *uses art to express ideas. contrasts the mood of songs presented to moods created by marches. *uses oral language to describe experience. *uses oral language to relate information. *uses numbers correctly in computing mileage, cost, etc. names at least five recreational facilities available in the local community. derives information needed to compute mileage from maps. *(Assessed at more than one center).

Learning Center Planning Sheet

Center Theme: Families in Other Countries **Unit Theme: Families**

Concepts

1. The basic needs of people are similar even though homes, clothing, food, language and customs may vary.

Introduction: Invite a resource person into the classroom to describe the customs and language of another country with an emphasis on family life. Films or filmstrips might be substituted. Answer questions that were prepared before the visit or film.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . perform basic movements by combining locomotor and non-locomotor movements. develop and refine sensory skills using auditory discrimination. develop and refine sensory skills using taste discrimination. *Affective* develop an understanding that families are different. recognize that there are certain ethical principles common to a majority of cultures in our society. *Cognitive* *A. Foreign Language* demonstrate comprehension of single words. identify a country where the foreign language is spoken. recognize customs and contemporary cultural patterns related to food, clothing, family life etiquette, work and leisure activities, education and religion. *B. Language Arts* demonstrate understanding of a basic vocabulary related to a person's environment. *C. Physical Education and Health* explain the interrelationships of family, cultural influences and personal development. *D. Social Studies* locate and work with information from a variety of sources. recognize and cite examples to illustrate that cultures borrow from one another. recognize and illustrate that all human beings have basic physical and psychological needs.	Gather more information about the country presented or use the family tree in selecting a country for study. Plan to share information about family life. Graph locations of ancestors found in gathering data for a family tree. Make a travel folder about a country. Research words borrowed from other languages (i.e. khaki, corral, opera, encore, ballet). Collect information needed to make an illustrated dictionary of at least ten nouns in another language. Plan and cook a dish from another country. Plan and present a puppet play about family life in another country. Present a game to the class from another country. Complete the statement "My Family Helps Me by . . .".	Books: *Home Life Around the World*, Mirick *Mexican Story*, McNeer *The First Book of Mexico*, Epstein *The First Book of the Netherlands*, Cohn *The Level Land*, Jong *My Village in France*, Church, etc.* Encyclopedias Dictionaries, English Dictionaries, Foreign language Filmstrips, projector "Children of Holland" "Mexican Children" "Janet's French Friends" etc.* Study prints Kits: "Christmas Around the World," etc.* Paper, pencils Art materials Filmstrip-making and book binding materials Cookbooks Cooking utensils, etc. *(The title on filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained. The following subject entries are suggested for use in the card catalog or standard indexes in locating local resources related to this unit: Boys; Girls; Children; Families; Family Life in (specific Country); Name of Country.	*Psychomotor* The child . . . performs successfully the basic movements included in games taught. recalls [illegible] presented by resource person or film. states three words which describe the food(s) tasted. *Affective* *states at least one way in which his/her family customs differ from a family's customs in another country. states at least one way in which his/her family customs are similar to the customs of a family from another country. *Cognitive* recognizes and pronounces at least ten words of a foreign language. identifies the language used to communicate in the country selected for study. describes the family life common to the country selected for study. uses words related to family life correctly. states at least two ways in which the family helps him/her. *uses a minimum of two resources in acquiring information (filmstrips, books, etc.) Identifies at least two customs of a foreign country which are similar to his/her own. *states at least two ways in which all families are alike. *(Assessed at more than one center).

Record Keeping

Unit Theme: Families

Explanation of Code

- – demonstrates less than satisfactory performance
- x demonstrates satisfactory performance
- + demonstrates consistent success and understanding (or date)

Children's Names

OBJECTIVES	
Psychomotor	
The child . . .	
successfully performs the basic movements included in games taught.	
manipulates tools (scissors, crayons, etc.) successfully to produce puppets, models, drawings, etc.	
coordinates movements of objects (puppets, and or models) to express ideas.	
Affective	
describes willingly his/her family.	
states at least one way in which his/her family is the same, and is different from another classmate's family.	
acknowledges the presence of and at least one contribution made by each family member.	
shares experiences regarding family recreational activities.	
states at least one way in which his/her family customs differ from a family's customs in another country.	
states at least one way in which his/her family customs are similar to the customs of a family from another country.	
Cognitive	
gains information by listening to family and class members during interviews.	
expresses ideas clearly orally and in writing.	
uses oral language to relate information.	
uses oral language to describe experiences.	
includes pertinent visual cues in communicating ideas.	
states three words which describe the food(s) tasted.	
uses words related to family life correctly.	
uses a minimum of two resources in acquiring information (filmstrips, books, etc.).	

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Record Keeping

Unit Theme: Families

Explanation of Code

– demonstrates less than satisfactory performance

x demonstrates satisfactory performance

+ demonstrates consistent success and understanding (or date)

Children's Names

graphs member of immediate and or extended family correctly.																								
computes ages and averages correctly.																								
graphs chores and or occupations correctly.																								
uses numbers correctly in computing mileage, cost, etc.																								
derives information needed to compute mileages from maps.																								
states at least two ways in which all families are alike.																								
identifies a minimum of two responsibilities belonging to each family member.																								
names at least five recreational facilities available in the local community.																								
describes the family life common to the country selected for study.																								
states at least two ways in which the family helps him her.																								
recalls facts presented by resource person or film.																								
recognizes and pronounces at least ten words of a foreign language.																								
identifies the language used to communicate in the country selected for study.																								
contrasts the mood of songs presented to mood created by marches.																								

Process Categories: Interpreting/Analyzing; Communicating

Concepts

1. Many industries produce goods for satisfying peoples needs and wants.
2. People require and desire a variety of products which are manufactured.
3. Although communities vary, all communities provide for people's needs.
4. People in a community work together to provide needed goods and services.
5. Each community is unique in its history and people.
6. Citizens should be aware of resources within their community.
7. All people obey rules.
8. Abilities, interests and values should determine which careers are chosen.
9. There are a variety of careers open to both men and women.
10. Many industries provide services which people need or want.
11. People work in order to provide for personal and family needs and wants.
12. Each person is unique.
13. School-age children perform work.
14. People require a variety of services.

			COGNITIVE OBJECTIVES				
CENTER THEMES	**PSYCHOMOTOR OBJECTIVES**	**AFFECTIVE OBJECTIVES**	**COMMUNICATION SKILLS**	**CREATIVE ARTS**	**MATHEMATICS**	**SCIENCE**	**SOCIAL STUDIES**
Learning About Communities	Posture Visual discrimination Eye-hand coordination	Work independently Use of time Respect ideas	Language patterns Sight vocabulary Record information				Use source
My Community	Posture Visual discrimination Eye-hand coordination	Work independently Use of time Respect ideas	Language patterns Slight vocabulary Use directory		Record relations		Representation Use maps Safety: guides for conduct Rules
Careers	Posture Eye-hand coordination	Work independently Use of time Respect ideas	Language patterns Sight vocabulary Record information		Construct graphs		Graphs Economic system
What Will I Be?	Posture Eye-hand coordination	Unique capabilities limitations Success	Language patterns		Reads scales		Economic system
Center* Service	Lift, etc techniques Interpret ideas	Group membership Manage environment Follow rules	Language patterns Use of mass media Use forms, etc		Appropriate operation Record money	Health poison symbol	Uses sources Safety: guides for conduct
Center* (Product)	Lift, etc techniques Interpret ideas	Group membership Manage environment Follows rules	Language patterns Uses forms, etc		Appropriate operation Record money		Uses sources
				*These centers are to be selected, named and developed by the students			

Learning Center Planning Sheet **Unit Theme: Our Families At Work in the Community**

Center Theme: Learning About Communities

Concepts

1. Although communities vary, all communities provide for people's needs.
2. People in a community work together to provide needed goods and services.

Introduction: Hold a town meeting to discuss the need for a town to have a name. Plan a poster contest to name the town (classroom). Introduce songs "Friendly Town" (Meeting Music 1) and/or "I Live in the City" (Spectrum, 2). View and discuss film "Cities". Chart vocabulary. Introduce center materials and activities.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor *The child will . . .* maintain appropriate good posture habits while sitting, walking, or standing. develop and refine sensory skills using visual discrimination. use and develop coordination of sensory skills, (i.e., eye-hand). *Affective* develop the ability to work independently. develop the ability to use time and resources wisely. develop the ability to consider and respect the ideas of others. *Cognitive* *A. Language Arts* use standard language patterns in oral and written forms. recognize and use sight vocabulary in context from various sources. write and compose for a variety of purposes; record information. *B. Social Studies* locate and work with information from a variety of sources.	1. Make a collage from magazine pictures illustrating the differences between cities, towns and the country. 2. Read *The Little Island* and discuss what would be taken and what would be left out if you were marooned. 3. Draw and describe scenes of a city, a small town, and/or a farm. 4. List jobs required in the classroom or at home for efficient operation. Mark these which must also be done by communities. 5. Research words related to communities (rural, urban, industrial, residential, etc.). 6. Use a variety of materials to gather information on suggested or self-selected topics. Plan to share this information in a report or a dramatization.	Assorted magazines for cutting Poster or butcher paper Scissors, glue Book *The Little Island* Tape recorder, blank tape Writing paper Word list Suggested topics for research Filmstrip projector Filmstrips: "Homes in the City" "Stores in the City" "Shopping" "How the City is Fed" "City Rhythms" "Sights and Sounds of the City" "Transportation in the City" etc.* Study prints: "How People Travel in the City" "Moving Goods in the City" etc.* Books: *A Place to Live*, Bendeck *Let's Find Out About Neighbors*, Pitt *Let's Find Out About Communities*, Pitt *Our Working World*, Seneah *Communities and Their Needs*, Anderson, etc.* The following subject entries are suggested for use in the card catalog or standard indexes in locating local resources related to this unit: Cities and Towns—(specific geographic locations); Cities and Towns—Pictorial Works; Cities and Towns—Poetry; Local Government; Local Transit; Community Life; Transportation; Villages; Work; Businesspersons, Business; Work—Pictorial Works).	*Psychomotor* *The child . . .* uses good posture while sitting, walking or standing *relates (two) facts gained from use of filmstrips, prints, books, etc. *uses correct strokes in forming letters on written work. *Affective* *able to work independently on at least one activity. *completes task(s) within allotted time. *listens attentively to reports and or dramatizations of others. *Cognitive* *communicates ideas clearly using standard language patterns in written and/or oral work. *does not ask for help in decoding Dolch words when reading. *writes informatively in content. uses more than one source of information in gathering data for written and/or oral work. *(Assessed at more than one center).

*The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections.

Learning Center Planning Sheet

Unit Theme: Our Families At Work in the Community

Center Theme: My Community

Concepts

1. Each community is unique in its history and people.
2. Citizens should be aware of resources within their community.
3. All people obey rules.

Introduction: List known careers, pantomime selected occupations for guessing game. Vote to decide which local business firms to visit. List known occupations, adding to list as unit proceeds. Visit two or three local business firms. Discuss film "Neighborhoods are Different." Learn songs with the flannel board ("My Community," David C. Cook).

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . maintain appropriate good posture habits while sitting, walking or standing. develop and refine sensory skills using visual discrimination. use and develop coordination of sensory skills, (i.e., eye-hand). *Affective* develop the ability to work independently. develop the ability to use time and resources wisely. develop the ability to consider and respect the ideas of others. *Cognitive* *A. Language Arts* use standard language patterns in oral and written forms. recognize and use sight vocabulary in context from various sources. interpret and use various forms of communication: directories. *B. Mathematics* picture or record relations, first using objects for representation, then by using diagrams or mapping. *C. Health and P. E.* identify and explain where community resources are located and how to use them. *D. Social Studies* use small objects to represent large ones. use map and globes frequently as sources of information. *E. Traffic Safety* define rules as guides for conduct in traffic mix to insure the safety of all. demonstrate knowledge of local and state traffic rules and regulations.	1. Name, draw and describe a/ the business firm(s) visited. 2. Write a thank-you note to firms visited. 3. Write sentences describing the order of events on the trip. 4. Sort cards describing the order of events on the visits. 5. Propose a beautification project. 6. Use yellow pages in telephone directory to list (5) local product industries and (5) local service industries. 7. Read the materials distributed by the local Chamber of Commerce. Write a pamphlet describing the local community for another student of the same age. 8. Share the information in Chamber of Commerce materials in a report of dramatization. 9. Draw a mural or map of the community. 10. Sort cards by matching places with items or services to be found there. 11. Build a model of the community from milk cartons, construction paper, etc. 12. Draw traffic safety signs for bulletin board 13. Enter a poster contest on traffic rules. 14. List rules (traffic, manners, etc.) All people must follow. 15. Locate selected places on map of local community. 16. Study center materials and apply the information to the local community. 17. Report on the differences between stores in the 1840s and today.	Art paper Crayons, paints, pens Writing paper Telephone directories Chamber of Commerce materials Mural paper Cards of places and items/ services Milk cartons, small boxes Construction paper Scissors, glue Filmstrip projector Filmstrips: "Learning to be a Good Citizen" "Conduct, Shopping" "Going Shopping" "Going Downtown" "The Store (in 1840)", etc.* Study prints: "Citizenship", etc.* *(When using standard indexes to resources and planning with media personnel, the following are some of the subjects which will direct you to resources: Citizenship; Shopping; Businessmen.)	*Psychomotor* The child . . . *uses good posture while sitting, walking or standing. *relates (two) facts gained from use of filmstrips, prints books, etc. *uses correct strokes in forming letters on written work. *Affective* *is able to work independently on at least one activity. *completes task(s) within allotted time. *listens attentively to reports and/or dramatizations of others. *Cognitive* *communicates ideas clearly using standard language patterns with written and/or oral words. *does not ask for help in decoding Dolch words when reading. uses directories correctly in listing local product and service industries. places representations in model community correctly. names at least two recreational facilities located within the local community. uses proportion in making model of community. locates selected locations in local community correctly. *states the necessity of traffic rules in insuring the safety of all. states at least (three) local or state traffic rules. *(Assessed at more than one center).

Learning Center Planning Sheet

Center Theme: Careers **Unit Theme: Our Families At Work in the Community**

Concepts

1. People work in order to provide for personal and family needs and wants.

Introduction: Chart needs and wants and relate to careers and career choices. Ask two school personal (i.e. media specialist and nutritionist) to visit the classroom to discuss how their jobs are related. Discuss film "Helpers Who Come to Our House." Learn song "Workers in Our Town." (This is Music, 1).

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will. . . maintain appropriate good posture habits while sitting, walking or standing. use and develop coordination of sensory skills (i.e. eye-hand). *Affective* develop the ability to work independently. develop the ability to use time and resources wisely. develop the ability to consider and respect the ideas of others. *Cognitive* *A. Language Arts* uses standard language patterns in oral and written forms. recognize and use sight vocabulary in context from various sources. write and compose for a variety of purposes; record information. *B. Mathematics* construct and interpret graphical representations. *C. Health and P.E.* demonstrate a knowledge of the opportunities for careers in the health field. know of careers in physical education. *D. Social Studies* construct and interpret graphs, charts, tables, and cartoons. explain, analyze and evaluate how some of the wants and needs of members of any society are satisfied through the economic family, educational systems, etc.	1. Draw parents' occupations for bulletin board "Our Parents at Work in the Community." 2. Write riddles describing particular careers. 3. Make a circle-a-word puzzle of various careers. 4. Graph the occupations represented by the parents of classmates. 5. Draw and label workers. "People Who Help Me Us." 6. Classify pictures and or word cards as product or service oriented. 7. Match names of careers with job descriptions. 8. Read *Horton Hatches the Egg*. Write understanding of the following terms responsible, irresponsible, task, work, reward. 9. Interview school helper(s). Describe and or chart tasks each performs. 10. Write a want ad (advertisement) for a job. 11. Interview (three) adults to determine their job histories. 12. Interview and or research one career. What abilities interests and values are related to success? 13. Match job description to study prints (pictures). 14. Complete crossword or study prints (pictures). 15. Match picture of person with tool(s) used and job title. 16. Sort cards or pictures into two categories: needs and wants.	Art paper Crayons, paints, pens Writing paper Graph paper Cards (picture or word) on careers Job descriptions Study prints: "Home and Community Helpers" "Learning About Careers" "People We Know" "Postal Helpers" "Supermarket Helpers" etc.* Book: *Horton Hatches the Egg*, Seuss Filmstrip, projector Filmstrips: "Factory Workers" "What Do People Do All Day?" "Community Helpers" "City Workers" "Policemen at Work" "Money Experiences" etc.* Kits: "World of Work: Adventure of the Lollipop Dragon" "Our Neighborhood Workers" etc.* Books: *Busy People*, Kaufman *Food Careers*, Creasy *Careers for the 70s*, Dodd, etc.* Career Crosswords Occupation Word Hunt Career Matching Cards Assorted cards of products and services for sorting	*Psychomotor* The child. . . *uses good posture while sitting, walking or standing. *uses correct strokes in forming letters on written work. *Affective* *is able to work independently on at least one activity. *completes task(s) within allotted time. *listens attentively to reports and or dramatizations of others. *Cognitive* *communicates ideas clearly using standard language patterns in written and or oral work. *does not ask for help in decoding Dolch words when reading. writes informatively in content. graphs occupations represented by the parents of peers correctly. states a minimum of (three) careers associated with health and physical education. discusses how certain personal needs and wants are satisfied through the economic system. *(Assessed at more than one center).

***The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections.**

Learning Center Planning Sheet **Unit Theme: Our Families At Work in the Community**

Center Theme: What Will I Be?

Concepts

1. Abilities, interests and values should determine which careers are chosen.
2. There are a variety of careers open to both men and women.
3. Each person is unique.
4. School-age children perform work.

Introduction: Discuss and chart ways in which people are similar and ways in which they are unique. Share different interests and hobbies. Learn song "What Will You Be?" (Making Music Your Own, K) or Matarile" (Spectrum, 1).

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child . . . maintain appropriate good posture habits, while sitting, walking or standing. use and develop coordination of sensory skills (i.e., eye-hand). *Affective* develop a sense of identity as a unique individual. develop an understanding of own capabilities and limitations. recognize success as important in motivating oneself and others. *Cognitive* *A. Language Arts* use standard language patterns in oral and written form. *B. Mathematics* reads measurement scales. *C. Social Studies* Explain, analyze and evaluate how some of the wants and needs of members of any society are satisfied through the economic, family, educational system, etc.	1. Work with others to write and or dramatize a play. 2. Write and/or illustrate an autobiography or "Who Am I?" booklet. Include vital statistics. 3. Complete questionnaire on what you do well and what you would like to do better. 4. Categorize word cards or list characteristics into three groups: (a) I am like all other persons (b) I am like some other persons (c) I am like no other person 5. Draw self at work (in school) for bulletin board "Kids at Work". 6. Write a paragraph and illustrate what you would like to be. 7. Make a scrapbook of illustrations and written statements about "Me" including likes, dislikes, hobbies, aspirations, skills and a description of physical characteristics. 8. Learn your complete name, address, telephone number, birthdate, parents names and places of work, and an emergency number. 9. Sort or list adjectives into two categories: "Like Me", "Unlike Me" (i.e., tall, friendly, curious). 10. Determine your values by writing what you do when not specifically told. Match to possible careers.	Book *Career Plays for Young People*, Richmond* Writing paper Props: hats, tools or assorted art materials for construction Bookbinding materials Lightweight cardboard Questionnaire Word cards: characteristics Word cards: adjectives Filmstrip projector Filmstrips: "What Good is School?" "Getting the Most Out of Your Day"* Books *Daniel Discovers Daniel*, Barnett Come to Work With Us . . . , Wilkinson, etc.* *(Some titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections which meet instructional objectives and may identify additional resources which can be obtained). The following subject entries are suggested for use in the card catalog or standard indexes in locating local resources related to this unit. Career Education: Occupations, (specific occupations); Behavior; Self.	*Psychomotor* The child . . . *uses good posture for sitting, walking or standing. *uses correct strokes in forming letters on written work. *Affective* states at least one way in which he she is unique. states at least one capability (success) and one limitation. *Cognitive* *communicates ideas clearly using standard language patterns in written and or oral work. measures weight and height for autobiography correctly. states as relationship between a career choice and the satisfaction of personal wants and needs. *(Assessed at more than one center).

Learning Center Planning Sheet **Unit Theme: Our Families At Work in the Community**

Center Theme: Center (Service)

Concepts

1. Many industries provide services which people need or want.
2. People require a variety of services.

Introduction: Vote on the type of service to be developed at the center. Discuss center activities and materials. Discuss participation and behavior expectations/limits as needed.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	
Psychomotor The child will . . . use proper techniques and methods to stoop, lift, carry, push and pull objects. create and interpret ideas through movement. *Affective* develop the ability to accept role as a group member. develop an understanding of how to work with others in managing the environment. develop the ability to understand and abide by rules. *Cognitive* *A. Language Arts* use standard language patterns in oral and written forms. interpret and use various forms of written communication, mass media. interpret and use forms, applications, agreements, etc. *B. Mathematics* determine when and how to use the four arithmetic operations. record amounts of money using the cent symbol with a decimal. *C. Health and P. E.* recognize poison symbols. *D. Social Studies* locate and work with information from a variety of sources. *E. Traffic Safety* define rules as guides for conduct in traffic mix to insure safety of all.	1. Research jobs associated with center. Describe tasks and tools. 2. Participate in contest to name town. 3. Hold town meeting to elect mayor, council members; determine budgets, building regulations and traffic rules. 4. Plan, diagram, and construct center after filing building permit. 5. Plan budgets. 6. Plan, create and conduct fitness tests for applicants or licensing tests. 7. Enforce rules developed by class. 8. Develop forms for tickets, purchase orders, receipts, applications and records. 9. Develop checklist for safety related to type of service. 10. Develop needed signs, posters, select logo. 11. Inspect and fine violators using checklist, chart results. 12. Conduct fire drills, health surveys, etc. 13. Conduct poster contest on safety and prevention. 14. Demonstrate good health or safety practices through dramatization. 15. Keep class informed on current events related to service. 16. Dramatize workers doing their job. 17. Conduct public service programs and/or announcements including one on symbol for poisons. 18. Plan and inform class about the service's duties, machinery and costs. 19. Solve teacher-written problems on budgeting, charting, determining cost efficiency, etc. 20. Determine skills needed for promotions, assess workers. 21. Evaluate services through town meetings, votes, surveys, etc.	Assorted books and other materials related to service selected. Materials to construct center. Writing paper, pencils. Poster paper. Safety information related to service selected. Puppets Puppet-making materials Role playing props Poison symbol and related information.	*Psychomotor* The child . . . *lifts and carries objects properly. *uses body movement in help express ideas in dramatization. *Affective* *works cooperatively in planning and completing tasks. *plans with group before undertaking tasks. *adheres to behavior limits developed with group. *communicates ideas clearly using standard language patterns in written and or oral work. *uses TV, newspapers, etc. in informing class of current events. *helps to develop forms for voting, permits, tickets, orders, applications, etc., and uses forms correctly. *uses correct operation in determining votes, budgets, costs of machinery, cost efficiency. *records money using cent and dollar decimal symbols correctly. Draws poison symbol from memory and states its meaning. *uses more than one source of information in gathering data for written and or oral work. *states the necessity of traffic rules in insuring the safety of all. *(Assessed at more than one center).

Learning Center Planning Sheet

Unit Theme: Our Families At Work in the Community

Center Theme: Center (Product)

Concepts

1. Many industries produce goods for satisfying people's needs and wants.
2. People require and desire a variety of products which are manufactured.

Introduction: Vote on the type of business to be developed at the center. Discuss center activities and materials. Discuss participation and behavior expectations limits as needed.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will . . . use proper techniques and methods to stoop, lift, carry, push and pull objects. create and interpret ideas through movement. *Affective* develop the ability to accept role as a group member. develop an understanding of how to work with others in managing the environment. develop the ability to understand and abide by rules. *Cognitive* *A. Language Arts* use standard language patterns in oral and written forms. interpret and use forms applications, agreements, etc. *B. Mathematics* determine when and how to use the four arithmetic operations. record amounts of money using the cent symbol and dollar symbol with a decimal. *C. Social Studies* locate and work with information from a variety of sources.	1. Research jobs associated with business selected including tasks and tools required. 2. Plan, diagram and discuss center after applying for building permit. 3. Request zoning permit from city council. 4. Plan budget, hours, tasks, name of business, manager and match people with tasks. 5. Open checking account and pay expenses, including salaries and costs of all materials needed. 6. Develop forms for orders, receipts, bookkeeper, etc. 7. Share information with class about tools, machinery, skills related to business. 8. Name, manufacture and sell a product. 9. Record sales, compute and spend any profits. 10. Take inventory, inspect production. 11. Plan and conduct an advertising campaign. 12. Select logo, signs. 13. Determine skills needed for promotion, assess workers. 14. Evaluate sales product and organization. 15. Dramatize workers doing their job.	Assorted books and other sources related to product selected. Materials to construct centers Writing paper, pencils. Materials needed to manufacture product. Poster paper Puppets Puppet-making materials Filmstrip-making materials Role-playing props	*Psychomotor* The child . . . *lifts and carries objects properly. *uses body movement to help express ideas in dramatization. *Affective* *works cooperatively in planning and completing tasks. *plans with group before undertaking tasks. *adheres to behavior limits developed with group. *Cognitive* *communicates ideas clearly using standard language patterns in written and/or oral work. *helps to develop forms for orders, receipts, bookkeeping, sales and uses forms correctly. *uses correct operations to determine budgets, balances, sales. *records money using cent and dollar/decimal symbols correctly. *uses more than one source of information in gathering data for written and/or oral work. *(Assessed at more than one center).

Record Keeping

Theme: Our Families At Work in the Community

Explanation of Code

- – demonstrates less than satisfactory performance
- x demonstrates satisfactory performance
- + demonstrates consistent success and understanding (on date)

OBJECTIVES	Children's Names
Psychomotor	
The child . . .	
uses good posture while sitting, walking or standing.	
lifts and carries objects properly.	
uses body movement to help express ideas in dramatization.	
Affective	
is able to work independently on at least one activity.	
records money using cent and dollar decimal symbols correctly.	
uses directories correctly in listing local product and service industries.	
names at least two recreational facilities located within the local community.	
locates selected locations in local community correctly.	
states the necessity of traffic rules in insuring the safety of all.	
states at least (three) local or state traffic rules.	
states a minimum of (three) careers associated with health and physical education.	
discusses how certain personal needs and wants are satisfied through the economic system.	
states a relationship between a career choice and the satisfaction of personal wants and needs.	
states at least one way in which he she is unique.	
works cooperatively in planning and completing tasks.	
completes tasks within allotted time.	
states at least one capability (success) and one limitation.	
plans with group before undertaking tasks.	
listens attentively to report and or dramatization of theirs.	
adheres to behavior limits developed with group.	

Record Keeping

Unit Theme: Our Families At Work in the Community

Explanation of Code

– demonstrates less than satisfactory performance

x demonstrates satisfactory performance

+ demonstrates consistent success and understanding (or date)

Cognitive	Children's Names
communicates ideas clearly using standard language patterns in written and/or oral work.	
relates (two) facts gained from use of filmstrips, prints, books, etc.	
does not ask for help in decoding Dolch words when reading.	
uses correct strokes in forming letters on written work.	
writes informative content.	
uses more than one source of information in gathering data for written and/or oral work.	
places representations in model community correctly.	
uses proportion in making model of community.	
graphs occupations represented by the parents of peers correctly.	
measures weight and height for autobiography correctly.	
uses correct operation in determining votes, budgets, costs of machinery, cost efficiency, balances, sales, etc.	
uses TV, newspapers, etc. in informing class of current events.	
helps to develop forms for voting, permits, tickets, orders, applications, etc. and uses forms correctly.	
helps to develop forms for orders, receipts, bookkeeping, sales and uses forms correctly.	
draws poison symbol from memory and states its meaning.	

General Planning

Process Categories: Relating; Classifying

Unit Theme: People in Space

Concepts

1. Information can be communicated in a variety of ways.
2. Information can be either factual or fictional.
3. There are many ways to learn about space. Good research takes a plan.
4. Research reporting needs to be accurate and clear.
5. A wide variety of resources are useful in learning about space.
6. Scientists have accumulated a wealth of information about space and space travel.
7. Humans have learned to adapt to many unusual environments.
8. A good plan is needed if cooperation between group members is required.
9. Symbols are an efficient way of communicating information.
10. The construction of space hardware is an intricate science.
11. Humans use technology in order to explore the environment.

			COGNITIVE OBJECTIVES				
CENTER THEMES	**PSYCHOMOTOR OBJECTIVES**	**AFFECTIVE OBJECTIVES**	**CREATIVE SKILLS**	**ARTS**	**MATHEMATICS**	**SOCIAL SCIENCE**	**STUDIES**
Language of Space	Visual perception	Works independently Seeks help	Fact/fiction Comparison	Art Expression		Terminology	
Researching	Manipulative Movement: fine motor	Realistic goals Use of time and resources	Research Skills Uses Aids		Time Distance	Solids/ Liquids/ Gases	Interpret graphs and charts
Real Space	Manipulative Movement: fine motor Fitness	Use of time and resources	Phonics: Sight words Uses aids			Solar System	Sequence events
Space Drama	Combines movements Moves to express ideas	Confidence Accepts praise and criticism	Retell main ideas Sequences	Music Drama			Adapting
Space Cooking	Manipulation of objects Perception: taste	Understand and abide by rules	Symbols Mass Media	Art	Sequence time/ fractions	Liquids/ solids/ gases	
Space construction	Manipulation of objects	Cooperation and compromise Respect ideas	Graphic information Diagrams	Art	Scale drawings		

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Learning Center Planning Sheet

Unit Theme: People in Space

Center Theme: Language of Space

Concepts

1. Information can be communicated in a variety of ways.
2. Information can be either factual or fictional.

Introduction: Form two teams. Each team takes turns reading and defining space related vocabulary on cards in order to "lift off." Record these words on chart paper. Introduce materials and task cards at center. Review clean-up procedures.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will. . . refine visual discrimination skills. *Affective* develop ability to work independently. develop the confidence to seek help when necessary. *Cognitive* *A. Creative Arts* express ideas through art media. *B. Language Arts* distinguish fiction from non-fiction, reality from fantasy. make comparisons using stated information. *C. Science* extend concepts and vocabulary related to space.	1. Classify pictures of objects as belonging "On Earth", "In Space". 2. Read and classify word cards as described above. 3. Draw two pictures of space scenes, one realistic, the other fictional. Describe each scene in narrative form. 4. Use word cards and or idea starters to write and illustrate a book about space travel. 5. Use word cards to make an illustrated dictionary. 6. Draw or paint a factual space picture. Write in the name of each object or person drawn. 7. Write answers to questions based on research. (i.e., Do green men live on Mars? Will the sun ever burn out and the earth turn cold? etc.) 8. Finish a story. (i.e., "I am going to Venus. . . . I am going to take with me. . . ." etc. 9. Read a fictional and an actual account of space travel. Communicate this information with pictures and or narrative descriptions. 10. Sort pictures (rockets, boats, monster, horse, star, etc.) into groups. i.e., "Real", "Not Real". 11. Write a description of a trip to the moon as an astronaut. 12. Make a filmstrip including pictures and or text based on realistic or fictional space travel.	Task cards or options list Scrap paper Tape recorder (optional) Blank tape Books about space Word cards, assorted pictures or drawings Art paper Crayons, paint, chalk, pens Writing paper Stapler Pencils, pens Story ideas Bookbinding materials Lightweight cardboard Directions for binding books Suggestions for research questions Statement cards Dictionaries Film, pens for filmstrip	*Psychomotor* The child. . . states which visual cues were used in classifying pictures and or words. *Affective* works independently without disturbing others. *Cognitive* requests help when needed. uses art media to express ideas. clearly differentiates between actual and fictional information in written or illustrated work. compares actual and fictional information fact for fact. uses at least five space related words in tasks completed.

Learning Centre Planning Sheet

Unit Theme: People in Space

Center Theme: Real Space

Concepts

1. A wide variety of resources are useful in learning about space.
2. Scientists have accumulated a wealth of information about space and space travel.

Introduction: List questions to be asked during a later trip to the planetarium or a visit by an expert. Reread these questions periodically, adding or refining as study proceeds. Introduce materials and tasks at center.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will. . . refine handwriting skills. *Affective* develop ability to use time and resources wisely. *Cognitive* *A. Language Arts* demonstrate an understanding of and use phonetic analysis clues and principles to identify new words. demonstrate an understanding of and use various aids to develop and expand vocabulary. *B. Health* illustrate or explain the relationship between exercise, weight, nutrition, stress, relaxation. *C. Science* describe earth as a sphere in space, part of solar planetary system. *D. Social Studies* sequence terms which denote time and arrange a series of events in chronological order.	1. Find and summarize newspaper articles dealing with space or space travel. 2. Make a clay model of the solar system depicting size/distance relationships. 3. Develop a team plan and draw a mural illustrating the history of the space race. 4. Research and/or brainstorm future space travels projects. Illustrate and describe the ideas. 5. List questions to be asked on trip to planetarium or visit/interview of expert. 6. Look up definitions of words listed. Use these words in sentences. 7. Write a report summarizing a book read from books in center. 8. Sequence a set of statement cards about countdown, lift-off, arrival and return. Copy and illustrate the statements. 9. Build a word bank of space-related vocabulary. 10. View filmstrips available in center, draw and/or write a summary. 11. Read about the safety precautions taken for space travel, plan ways to share findings with the group. 12. Describe what the scientists do about weightlessness, lack of oxygen outside capsule, food, waste disposal, sleep and exercise in space.	Newspapers Paper, newsprint Pencils Encyclopedias Map of Solar System Assorted books on space Clay Rulers Paper for mural Paints, crayons, chalk Word lists Dictionaries Statement cards Cards for word banks Filmstrip projector Filmstrips: "Outer Spaces-Exploration Moonwalk" "Space Vehicles-Man Into Space" "Star Wars - The Making of Star Wars" "The Planets" * Bookbinding materials Light cardboard Books: *Who Really Invented the Airplane?*, Cooks *You Will Go to the Moon*, Freeman *The Giant Book of Things in Space*, Zaffo *The True Book of the Moon* Ride Rock Hunt, Frisky *	*Psychomotor* The child. . . writes legibly *Affective* *completes tasks efficiently and thoroughly. *Cognitive* decodes beginning and ending sounds of unknown words correct correctly. *uses more than two sources of information in completing tasks. explains how fitness (exercise, nutrition, relaxation, etc.) is maintained in space. states that earth is a sphere. defines solar system. sequences a series of events in chronological order. *(Assessed at more than one center.)

*The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections.

Learning Center Planning Sheet **Unit Theme: People in Space**

Center Theme: Space Drama

Concepts

1. Humans have learned to adapt to many unusual environments.

Introduction: Discuss film "Space Flight Around the Earth". Chart the main ideas or ask children to draw and/or write two important facts learned from the film. Act out "weightlessness". Introduce materials and task options at this center.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will. . . perform basic movements by combining locomotor and nonlocomotor movements such as bending while walking, etc. use movement to express creative ideas. *Affective* display increased confidence in ability to attempt new tasks with anticipation of success. develop the ability to accept praise and/or criticism in a constructive manner. *Cognitive* *A. Creative Arts* reacts to various background music with actions, reactions and movement. express ideas through drama. *B. Language Arts* recognise, recall and retell main ideas, details, sequence, cause-effect. *C. Social Studies* identify, describe, and analyze adaptive patterns which emerge as people adapt to physical and social environment.	1. Read the story about Neil Armstrong's first steps on the moon. Dramatize this event. 2. Plan and present a puppet show which includes a flag designed to be left on the moon and an appropriate statement for the first man landing on Venus. 3. Plan and present a dramatization of ideas for future space travel. 4. Listen to records and move to show the music's mood, tempo, pitch and rhythm. 5. Describe this music by using fingerpaint, tempera, chalk, or crayons. 6. Create a song using bells, xylophone, etc.	Book: *Americans to the Moon*, Gurney* Prop-making materials: fabric, oaktag, construction or crepe paper Paper, pencils, scissors, glue Puppet-making materials: sack, sticks, yarn, buttons, fabric, etc. Records: "Star Wars" "Empire Strikes Back" "Moon Synthesizer" etc.* Art paper: fingerpaint, manilla, butcher, etc. paints, chalk, crayons, pens, xylophone, bells, etc. *(The titles of filmstrips, books, and other instructional resource listed above are included as examples. Some titles are not currently available commercially). Teachers and media specialists, working together, can identify material existing in local collections which meet instructional objectives and may identify additional resources which can be obtained. The following subject entries are suggested in locating local resources related to this unit: Space and Time; Astronautics; Weightlessness; Space Flight; Space Vehicles; Apollo Project; (other space projects); Outer Space—Exploration; Rockets (Aeronautics); Astronauts; Planets; Solar System; Moon; (name of planets); Outer Space.	*Psychomotor* The child. . . moves in a coordinated manner. moves creatively to express ideas. *Affective* appears confident before peers. accepts praise and/or criticism constructively. *Cognitive* reacts to mood, tempo, etc. of music by moving arms, etc. uses drama to express ideas. portrays main events, details, sequence and cause-effect relationships of a story accurately. states or dramatizes (two) ways in which astronauts adapt to the environment of space.

Learning Center Planning Sheet

Center Theme: Space Cooking **Unit Theme: People in Space**

Concepts

1. A good plan is needed if cooperation between group members is required.
2. Symbols are an efficient way of communicating information.

Introduction: Each child may draw three foods he believes are provided astronauts in space, or suggestions may be charted for the class. Unsuitable foods are crossed off the list as research continues. Review safety precautions before introducing tasks and materials.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will. . . practice and refine manipulation of objects. develop and refine sensory descrimination skills involving taste. *Affective* develop the ability to understand and abide by rules. *Cognitive* *A. Creative Arts* express ideas through art media. *B. Language Arts* interpret and use symbols and symbolic language. describe a primary function of mass media. *C. Mathematics* give an example of an ordered pair of whole numbers used in a fraction context. place objects/events in order by using a property such as time. *D. Science* differentiate among solids, liquids, and gases.	1. Research to find out what foods are taken into space, how they are preserved, etc. Summarize this information. 2. Find recipes for foods taken into space or recipes of foods which are similar. 3. Draw and/or write one recipe, list ingredients needed and prepare a shopping list indicating items and quantities. Use newspaper to estimate cost. 4. Plan a well-balanced space meal, illustrate. 5. Brainstorm and plan for a fund-raising event to raise money needed to buy food for cooking experiences. 6. Write a step-by-step list of things to do. 7. Develop a work outline for cooking, detailing times and responsibilities. 8. Cook and eat your food or meal. Clean up work area. 9. Collect opinions of classmates regarding taste, texture, favorite dish. Graph these results. 10. Write an evaluation of the cooking project. 11. Draw pictures of the solids, liquids and gases observed during cooking. 12. Research the list of foods suggested by the class. Which foods are suitable for space travel? Which foods unsuitable? Why?	Books on space Encyclopedias Paper, pencils Recipe books Newspaper, food section Books on nutrition Hotplate, and/or microwave Cooking utensils Paper plates, cups, etc. Graph paper	*Psychomotor* The child. . . *handles objects in a coordinated manner (utensils, pans, etc.). describes food tasted. *Affective* follows work outline, accepts responsibility. *Cognitive* *uses art to express ideas. uses symbols on recipes correctly. states the use made of daily newspapers. uses fractions correctly in measuring ingredients. *orders events by time. *differentiates among solids, liquids, and gases. *(assessed at more than one center).

Learning Center Planning Sheet

Center Theme: Space Construction **Unit Theme: People in Space**

Concepts

1. The construction of space hardware is an intricate science.
2. People use technology in order to explore the environment.

Introduction: Discuss examples of blueprints. What are blueprints used for? What do the numbers mean? Volunteers might draw the classroom to scale. Introduce materials and task options available.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will. . . practice and refine manipulation of objects (i.e., hammering, molding). *Affective* develop an understanding of the cooperation and compromise. develop the ability to consider and respect the ideas of others. *Cognitive* *A. Creative Arts* express ideas through art media. *B. Language Arts* interpret and use information presented graphically, such as diagram. *C. Mathematics* read and make scale drawings.	1. Draw a blueprint detailing plans for building a rocket, space capsule and or launch site. 2. Discover an energy source common to classrooms (rubber band). Experiment to find out how this may be used to thrust objects forward. 3. Build a model from clay, papier mache, or wood. 4. Work out a plan time schedule for sharing materials which are limited (hammers, clay, etc.). 5. Research and report on audiovisual methods of communicating in space. 6. Plan and build a short wave radio and or telegraph. 7. Make paper airplanes (rockets). Graph distances achieved by each model. 8. Construct a paper airplane for competition with other airplanes made by classmates. 9. Find out the many ways people have communicated with each other throughout history. Describe, illustrate and share your information.	Examples of blueprints, plans Books on rockets Rubber bands Lightweight objects for projecting Clay, paper mache or wood Glue, nails, hammers Old radio Wood, wire, nails, battery, switch, etc. Heavyweight paper for airplanes Rulers, scissors Graph paper	*Psychomotor* The child. . . *handles objects in a coordinated manner (hammer, clay, etc.). *Affective* plans cooperatively. respects the ideas of others. *Cognitive* *uses art to express ideas. makes diagrams and scale drawings. *(Assessed at more than one center).

Learning Center Planning Sheet

Center Theme: Researching Space **Unit Theme: People in Space**

Concepts

1. There are many ways to learn about space. Good research takes a plan.
2. Research reporting needs to be accurate and clear.

Introduction: Introduce space books to children in a small or in a large group. What are other ways we can find out more about space and travel in space? List ideas on chart. Introduce materials and task cards at center.

OBJECTIVES	ACTIVITY OPTIONS	CENTER MATERIALS	ASSESSMENT
Psychomotor The child will. . . refine handwriting and/or typing skills. *Affective* develop ability to set realistic goals. develop ability to use time and resources wisely. *Cognitive* *A. Language Arts* demonstrate an understanding of and use of various aids to develop and expand vocabulary. *B. Mathematics* place objects in order by using a property such as distance, time. *C. Science* differentiate among solids, liquids, and gases. demonstrate light control through optical devices such as mirrors and lenses. *D. Social Studies* construct and interpret graphs, charts, etc.	1. Select a topic. Develop questions to be answered, an outline and a work plan. Share findings (individual or group). Topic suggestions may be included. 2. Research, draw and label parts of a rocket. 3. Plan and make a mural depicting a space scene. Label objects and/or people. 4. Research and list the costs of space travel including fuel, materials, labor. Compute total costs. 5. Classify pictures and/or word cards into groups: solid, liquid, gaseous (vapor). 6. Drop marbles into pan of plaster of paris, compare and chart size of "crater" to distance dropped. 7. Draw and describe what is seen through a prism, binoculars, a lens, a piece of glass and a telescope. 8. Make a three-week calendar to draw the phases of the moon, collect data. 9. Visit playground, describe experiences with gravity (slide, swing, toss ball) and weightlessness. 10. Measure a small scale model or map of solar system to determine diameters of planets, distance between each planet and distance from the sun, and time required for travel. Chart results. 11. Each weighs him/herself and computes his/her weight on the moon. Calculators may be used. 12. Read explanation of experiment using flashlight and ball/orange. Record the results of your experiment.	Books on space: *Birds and Planes, How They Fly*, Lewellen *Helicopters to the Rescue*, Colby *The Spaceman in the Rocket Ship*, Carlson *Moon Man*, Ungerer, etc.* Encyclopedias Dictionaries Study Prints: "The Solar System" Newsprint Writing paper, pencils Typewriter (optional) Mural paper Paints, pens, crayons Filmstrips (optional) Calculator (optional) Word cards (solids, etc.) Marbles Pan Plaster of paris Chart paper Prism Binoculars Lens Glass Telescope Calendars Model/map of Solar System Scale Flashlight Globe, ball or orange	*Psychomotor* The child. . . *types or writes legibly. *Affective* chooses activities which are neither too difficult nor too easy. *completes tasks efficiently and thoroughly. *Cognitive* *uses more than two sources of information in completing tasks. *orders objects/events by time and distance. *differentiates among solids, liquids and gases. differentiates what is seen when using various optical devices. *(Assessed at more than one center)

*The titles of filmstrips, books, and other instructional resources listed above are included as examples. Some titles are not currently available commercially. Teachers and media specialists, working together, can identify materials existing in local collections.

Record Keeping

Unit Theme: People in Space

Explanation of Code

- – demonstrates less than satisfactory performance
- x demonstrates satisfactory performance
- + demonstrates consistent success and understanding (or date)

OBJECTIVES	Children's Names
Psychomotor	
The child . . . writes legibly.	
moves in a coordinated manner.	
moves creatively to express ideas.	
handles objects in a coordinated manner (utensils, pans, hammers, clay, etc.).	
Affective	
works independently without disturbing others.	
requests help when needed.	
chooses activities which are neither too difficult nor too easy.	
completes tasks efficiently and thoroughly.	
appears confident before peers.	
accepts praise and/or criticism constructively.	
follows work outline, accepts responsibility.	
plans cooperatively.	
respects the ideas of others.	
Cognitive	
states which visual cues were used in classifying pictures and/or words.	
differentiates between what is seen when using various optical devices.	
clearly differentiates between actual and fictional information in written or illustrated work.	
compares actual and fictional information fact for fact.	
uses more than two sources of information in completing tasks.	
uses at least five space related words in tasks completed.	
decodes beginning and ending sounds of unknown words correctly.	
portrays main events, details, sequence and cause-effect relationships of story accurately.	

Record Keeping

Unit Theme: People in Space

Explanation of Code

- – demonstrates less than satisfactory performance
- x demonstrates satisfactory performance
- + demonstrates consistent success and understanding (or date)

	Children's Names
orders objects/events by time and distance.	
constructs graphs and charts.	
sequences a series of space-related events in chronological order.	
uses symbols on recipes correctly.	
uses fractions correctly in measuring ingredients.	
orders events by time.	
makes diagrams and scale drawings.	
differentiates among solids, liquids, and gases.	
states that earth is a sphere.	
defines solar system.	
explains how fitness (exercise, nutrition, relaxation, etc.) is maintained in space.	
states the use made of daily newspapers.	
states or dramatizes (two) ways in which astronauts adapt to the environment of space.	
describes food tasted.	
reacts to mood, tempo, etc. of music by moving arms, etc.	
uses drama to express ideas.	
uses art to express ideas.	

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